

# Building Vocabulary from Word Roots

synonyms      adverbs      classroom  
adverbs      verbs      nouns  
**Vocabulary**  
antonyms      context      SAT  
flipped      words

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## Preface

This book has been designed, developed, and used as an additional text book for students who study Reading and Writing for General Purposes at Udon Thani Rajabhat University. The objective is to provide students with essential vocabulary for them to use in reading and writing English, particularly at university level.

The book consists of 5 chapters. Chapter 1 introduces the way to decode the meaning of unknown words through word parts. Chapter 2 focuses on Prefixes. Suffixes can be found in Chapter 3. Chapter 4 provides Greek and Latin roots to assist in learning to understand unknown vocabulary. Finally, academic vocabulary can be found in Chapter 5. Every chapter contains step-by-step exercises to increase the knowledge of vocabulary. With this book, students will be able to practice learning vocabulary which usually appears in academic text books.

The author hopes that this book will be beneficial and fruitful for students to apply in reading and writing English in a much more accurate and appropriate way.

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# **Chapter 1**

## **Structural Analysis**

### **Introduction**

The majority of English words have been created through the combination of morphemic elements known as prefixes and suffixes. These morphemic elements are connected to the base words and word roots. Understanding how this combination process works, will enable someone to possess one of the most powerful tools necessary for vocabulary growth. (Anderson & Freebody, 1981) These would include root or base words, compound words, prefixes or suffixes, derivational and inflectional meanings, and/or Greek or Latin roots.

### **Structural Analysis**

Structural analysis or morphemic analysis is an effective way to determine the meaning of unknown words through individual word units or word parts such as root words or base words, prefixes, suffixes, inflectional endings, and Greek and Latin roots. Linguists call these word parts “morphemes.” A morpheme is the smallest part of the word that carries meaning. When readers assemble the parts of a word, they are better able to construct meaning of an entire word. (Bauman, Carr Edwards, Boland, Olejnik & Kame’enui, 2010) Morphemes can be divided into a free and a bound morpheme; a free morpheme or root word, can stand alone (e.g. *cut*), while a bound morpheme needs to be attached to another morpheme (e.g. *ing*, *un*), and two free morphemes can combine to form a compound word (e.g., *airplane*). (Blachowicz & Fisher, 2004)

In order to study structural analysis, students must first know the terms that are relevant to the structural or morphemic analysis in order to understand how to apply the uses of the root and base words, prefixes, and suffixes to discover the meaning of a word. Basic terminologies with definitions are as follows:

### **Words**

When discussing “word-formation,” it is important to clarify the term “word.” According to Marchand (1969), a “word” is something which “denote[s] the smallest independent, indivisible, and meaningful unit of speech, susceptible of transposition in sentences.” And words have been defined as freestanding elements of language that have meaning. (McCarthy, 1990) Therefore, words are units composed of one or more morphemes; they are also the units of which phrases are composed. (Delahunty & Garvey, 2010)

### 1. Three senses of words

Lyons (1968) divides the term “*word*” into three senses: phonological or orthographic, grammatical, and the “abstract” entity.

1.1 Phonological or orthographic: the phonological word can simply be defined as the combination of sounds to form a meaningful entity and the phonological word may represent two or more different orthographic words. (Lyons, 1968) The orthographic word represents this entity “as a unit of the writing system” (Plag, 2003) shown in Table 1-1:

**Table 1-1 Phonological and orthographic words**

Phonological word	Orthographic word
/kæt/	cat
/in- 'fɔrm/	inform
/'tü/	too or two
/sʌ n/	sun or son

1.2 Grammatical: different word-forms which have different grammatical properties may be added to one paradigm (As shown in Table 1-2). This paradigm is also referred to as lexeme. (Bauer, 1983; Kastovsky, 1982; Lyons, 1968; Plag, 2003)

**Table 1-2 The paradigm and word-forms**

The paradigm or lexeme	Word-forms
run	runs, ran, running, runner
beauty	beauties, beautician, beautiful, beautifully
happy	happily, happiness, unhappy, unhappily
write	writes, writable, writer, rewrite

1.3 Abstract entity: a lexeme, thus, may be regarded as the abstract entity where a “set of word forms” constitute one paradigm. According to Haspelmath & Sims (2010), the lexeme is a word in an abstract entity that has no phonological form of its own. The lexeme is assumed as a dictionary word, since in English dictionaries are organized according to lexemes.

### 2. Parts of speech

Wardhaugh (1995) defined words as the kinds of entities that find their way into dictionaries, and English words may be grouped into various categories traditionally called parts of speech, which are the most basic components of English grammar, and that we make use of the knowledge of these categories when combining into larger units in phrases and clauses. Traditionally, there are eight parts of speech

in English: nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjections. (Börjars & Burridge, 2010; Delahunty & Garvey, 2010; Gärdenfors, 2014; O'Brien, 2012; Oshima & Hogue, 1991, 1999; Wardhaugh, 1995)

## 2.1 Nouns

Nouns are words that commonly refer to things, persons, places, objects, events or substances.

**Examples:**

- *Robert Einstein* is very clever.  
“*Robert Einstein*” refer to a name of a person.
- *Cats* can be extremely lovely.  
“*Cats*” names an animal.
- Today is his *birthday*.  
“*birthday*” refers to an event.

### 2.1.1 Functions of nouns

A noun has the ability to perform different functions in sentences. Some of the noun functions are as follows:

(1) A noun can be the subject of a verb that tells us whom or what a sentence is about.

**Examples:**

- *Tom* teaches his son to do homework.  
“*Tom*” is the subject of the verb “teaches.”
- *She* is writing.  
“*She*” is the subject of the verb “is writing.”

(2) A noun can be the direct or indirect object of a verb. Direct objects are nouns that receive the action of certain kinds of verbs while indirect objects receive the direct object.

**Examples:**

- I buy *books*.  
“*books*” is the direct object of the verb “buy.”
- He gave *me* the gift.  
“*me*” is the direct object and “gift” is the indirect object of the verb “gave.”

(3) A noun or a pronoun can be the objects of prepositions. The objects of prepositions are nouns that come after a preposition in prepositional phrases.

**Examples:**

- My mother has returned from *the office*.  
“*the office*” is the object of preposition “from.”
- The party will be held at *the hotel*.  
“*the hotel*” is the object of preposition “at.”

(4) A predicate noun or predicate nominative is a noun or a noun phrase that renames the subject of the sentence and comes after verb “*to be*” or another linking verb. A predicate noun completes the verb (an intransitive verb) to complete the meaning of the sentence.

**Examples:**

- My daughter became *a professional volleyball player*.  
“*a professional volleyball player*” is the predicate noun to complete the verb “became.”
- Whitney Houston was *a great singer*.  
“*a great singer*” is the predicate noun to complete the verb “was.”

(5) An object complement is a noun that completes the direct object to rename it or state what it has become.

**Examples:**

- They named the baby *Mary*.  
“*Mary*” is the object complement to the object “the baby.”
- I found my child *sleeping*.  
“*sleeping*” is the object complement to the object “my child.”

**2.1.2 Types of nouns**

There are different types of nouns and nouns may belong to more than one of the following types.

(1) Common: a common noun is a word used to name a general, nonspecific person, place, thing, or idea. A common noun does not require a capital letter unless they begin a sentence.

**Examples:**

- **Person:** child, inventor, singer
  - **Place:** city, university, restaurant
  - **Thing:** chair, expression, snow
- My *child* lives in a nearby *city*.  
The cat sleeps on a *chair*.

(2) Proper: a proper noun is a name of specific people, places, things, or ideas that always starts with a capital letter.

**Examples:**

- **Person:** Anne, Steve Jobs, Adele
- **Place:** New York, Oxford, White Elephant
- **Thing:** (the) Bible, Concorde, Time Magazine  
*Adele studied at Oxford.*  
He reads *the Bible*.

(3) Abstract: an abstract noun names something that you cannot experience through one of five senses (touch, hear, see, smell, taste); something that does not physically exist.

**Examples:**

- angry, believe, happiness, truth, imagination  
I am very *angry* that you didn't call me last night.  
Please tell me the *truth*.

(4) Concrete: a concrete noun names something that you can experience through one of five senses (touch, hear, see, smell, taste); something that physically exists.

**Examples:**

- **Touch:** stone, flower, wind
- **Hear:** cry, shout, music
- **See:** cloud, rainbows, sun
- **Smell:** cinnamon, odor, perfume
- **Taste:** tea, honey, ice cream  
His new house is built of *stone*.  
I can smell the *odor* of cigarette smoke.

(5) Countable: a countable noun names people, places and things that can be counted, and they use both the singular and the plural forms.

**Examples:**

- **Regular:** bird/birds, school/schools, teacher/teachers
- **Irregular:** child/children, man/men, sheep/sheep  
Mrs. Green is our new *teacher*.  
My *children* love ice cream very much.

(6) Uncountable or mass: an uncountable noun names things that cannot be counted and be used only in the singular form and we need to use “counters” to quantify it.

**Examples:**

- **Uncountable nouns:** rice, sugar, water, milk, cake
- **Counters:** kilo, cup, centimeter, jar, piece, glass, bar

I like to drink several *glasses* of *milk* a day.

She ate many *pieces* of *cake* at the party.

(7) Compound: a compound noun involves combining two or more words which normally has two parts. The first part tells us what kind of an object or a person it is, or what its purpose is. The latter part identifies the object or the person in the first part. A compound noun can be a word written together as a single word, a word that is hyphenated, a separate word or two words that go together by meaning.

**Examples:**

fireman, dry-cleaned, full moon

I was very excited about the *full moon* on Monday night.

This coat should be *dry-cleaned*.

(8) Collective nouns: a collective noun refers to a singular noun that refers to a group of people or things as one whole.

**Examples:**

team, jury, group, army, family

Our *class* will go to the museum next week.

My sister is a member of the volleyball *team*.

(9) Singular and plural: a singular noun refers to one person, place, thing, or idea. In contrast, a plural noun refers to more than one person, place, thing, or idea. They generally end in with *-s*, *-es*, or *-ies*.

**Examples:**

- **Singular:** pen, box, city

- **Plural:** pens, boxes, cities

Put that ring in a jewelry *box*.

My husband bought me many *boxes* of chocolates.

However, there are many irregular nouns which do not form plurals in this way. Some nouns have different plural forms and some have the same form both in the singular and the plural.

**Examples:**

- **Singular:** child, man, sheep

- **Plural:** children, men, sheep

(10) Possessive nouns: a possessive noun shows ownership by adding an apostrophe and “s” or genitive marker to indicate a singular possessive noun e.g. Tom’s book, or only adding an apostrophe with a plural noun that usually ends with “s” to make it possessive e.g. students’ accommodation.

**Examples:**

- Book’s cover, Steve’s house, Students’ bags
- Steve’s house* is surrounded by beautiful scenery.
- This *book’s cover* is made from silk.
- I am saving all the *kids’ toys* for charity donation.

## 2.2 Pronouns

A pronoun is a major subclass of nouns because it sometimes replaces a noun or noun phrase in a sentence. A pronoun helps avoid the monotonous repetition of nouns. The word or words in which a pronoun refers to, is called the antecedent.

**Examples:**

- **Noun:** *Mary* got a new car.
- **Pronoun:** *She* got a new car.
- **Noun:** *Steve Jobs* is the Apple computer co-founder.
- **Pronoun:** *He* is the Apple computer co-founder.
- **Noun:** The *students* study harder.
- **Pronoun:** *They* study harder.

The words “*Mary*” and “*Steve Jobs*” are proper nouns, and “*students*” is a common noun, which can be substituted with the pronouns “*She*”, “*They*”, and “*He*” to become antecedents.

### 2.2.1 Functions of pronouns

A pronoun can be used as a substitute wherever a noun or a noun phrase can be used in a sentence like subjects, direct objects, indirect objects, objects of the proposition etc.

**Examples:**

- Not only is Tom Brian a writer, but he is also a musician.  
“he” refers to “Tom Brian” and is used as the subject of the verb.  
I was thinking about a new job and I believed she was thinking about *that*, too.  
“that” refers to “a new job” and is used as the object of the preposition.

### 2.2.2 Types of pronouns

There are five types of pronouns, these include:

(1) Personal: a personal pronoun is a word or phrase that may be used to replace common and proper nouns. The pronoun can provide information about the person; Who is speaking?, number; Is the pronoun plural or singular? and gender; Is the pronoun feminine, masculine, or unknown?

**Table 1-3 Pesonal pronouns**

Person	Number	Subject	Object	Possessive Object	Possessive Adjective
First	Singular	I	me	mine	my
	Plural	We	us	ours	our
Second	Singular	You	you	yours	your
	Plural	You	you	yours	your
Third	Singular Masculine	He	Him	His	His
	Feminine	She	Her	Hers	Her
	Non-personal	It	It	Its	Its
	They	They	them	theirs	their

(Adapted from Borjars & Burridge, 2010; Delahunt & Garvey, 2010)

(2) Relative: a relative pronoun refers to noun that introduces relative clauses or adjective clauses to the rest of the sentence. The relative pronouns can refer to persons such as *who*, *whoever*, *whom*, *whomever*, *whose* or things such as *that*, *whatever*, *which*, *whose*.

**Examples:**

The woman *who* lives next door broke her leg.

“*who*” refers back to “the woman.”

The book *that* she took is mine.

“*that*” refers back to “the book.”

(3) Reflexive and intensive: reflexive pronouns and intensive pronouns are named depending on how they are being used. A reflexive pronoun is used to indicate the subject of the sentence and indicates the person who is realizing the action of the verb. An intensive pronoun adds to emphasize a noun or another pronoun. These two types of pronouns are ended in “-self” or “-selves” and place emphasis on its antecedent.

**Examples:**

- **Reflexive:** I will go to the office *myself*.  
They pleased *themselves* with a great meal.
- **Intensive:** He *himself* visited the office.  
We *ourselves* decorated this room.

(4) Demonstrative: a demonstrative pronoun is used to point out or describe specific persons, places, things, or ideas within a sentence. It represents a thing or things and indicates items in space or in time, and it can be either singular or plural. The demonstratives pronouns are *this*, *that*, *these*, *those*.

**Examples:**

- *This* and *that* are singular and are used with singular nouns.  
This is a good book.  
I really like that book.
- *These* and *those* are plural and are used with plural nouns.  
These are good books.  
I really like those books.

(5) Interrogative: an interrogative pronoun is used to form questions. There are five interrogative pronouns: *what*, *whom*, *whose*, *who*, *which*. Each one is used to ask a very specific question.

**Examples:**

*Who* called last night?  
*Which* one is your book?

(6) Indefinite: an indefinite pronoun refers to a nonspecific person, place, or thing that includes *another*, *anybody*, *anyone*, *anything*, *each*, *either*, *everybody*, *everyone*, *everything*, *little*, *much*, *neither*, *nobody*, *no one*, *nothing*, *one*, *other*, *somebody*, *someone*, *something*, *both*, *few*, *many*, *others*, *several*, *all*, *any*, *half*, *more*, *most*, *some*, etc.

**Examples:**

*Someone* took my bag.  
*Both* of you are good.  
*Half* of my students are absent.

(7) Possessive: a possessive pronoun shows ownership or possession which used to avoid repeating information that has already been made clear. The possessive pronouns are classified into singular pronouns: *my*, *mine*, *your*, *yours*, *his*, *her*, *hers*, *its* and plural pronouns: *our*, *ours*, *your*, *yours*, *their*, *theirs*.

- Examples:**
- The second house on the left is *mine*.
  - Her* ring is in a box on the table.
  - Their* cars are in the garage.

## 2.3 Verbs

A verb is a word that expresses an action, an occurrence, or a state of being and is necessary to make a statement.

### 2.3.1 Categories of verbs

There are three categories of verbs: action verbs, linking verbs, and helping verbs. Action and linking verbs are called main verbs, the verbs that are strong enough to be the only verb in the sentence, while helping verbs are not, and are used as connectors to the action and linking verbs.

(1) An action verb expresses specific actions and tells what someone or something does. An action verb is classified into two types; a transitive verb is an action verb that is followed by direct objects (someone or something receives the action of the verb) that answers the question What? or Whom? and an intransitive verb is an action verb that is NOT followed by direct objects that answers the question What? or Whom? The intransitive verb is not done to someone or something and is only involves the subject.

- Examples:**
- **Transitive:** My parents *took* me to the movie. Whom did my parents take?
  - **Intransitive:** The baby *cried*.

(2) A linking verb is a verb that links or joins the subject of a sentence with an adjective, a noun, or pronoun. These verbs are: *be* (*is, am, are, was, were, were, and being*), *appear, become, etc.*

- Examples:**
- I *am* a teacher.
  - She *feels* bad.
  - The verbs “*am* and *feels*” tell about the state of the subjects.  
[I and She]

(3) A helping verb (sometimes called an auxiliary) is the verb that helps either an action verb or a linking verb. There are 24 common helping verbs: *be, is, am, are, been, being, was, were, has, have, having, had, can, could, shall, should, may, might, must, will, would, do, does, did*.

**Examples:** She *will play* the violin. [*will* = helping verb, *play* = action verb]

He *will be* a football player. [*will* = helping verb, *be* = linking verb]

When a helping verb is used with an action or linking verb, it is called a verb phrase.

**Examples:** I *am waiting* for a call.  
“*am*” is a helping verb, “*waiting*” is an action verb, “*am waiting*” is a verb phrase.

### 2.3.2 Principal parts or forms of verbs

There are five principal parts or forms of verbs, these include: (1) the base form is the form under which the verb would be entered in a dictionary and the form used in the present tense, (2) the *-s* form is the present form which agrees with a third person singular subject ends in *-s*, (3) the past tense form is the base form ends in *-d* or *-ed* (the *-d* form) for all regular verbs, however there are some different forms for irregular verbs, (4) the past participle (the *-en* form) indicates past or completed action or time which have the same forms as their past forms for regular verbs but different forms for irregular verbs, and (5) the present participle (the *-ing* form) which always ends in *-ing*.

<b>Table 1-4 Principal parts of regular verbs</b>				
<b>Regular Verbs (past and past participle forms for regular verbs end with <i>-ed</i>)</b>				
<b>Base</b>	<b>-s form</b>	<b>Past</b>	<b>Past Participle</b>	<b>Present Participle</b>
play	plays	played	played	playing
want	wants	wanted	wanted	wanting
drink	drinks	drank	drunk	drinking
eat	eats	ate	eaten	eating

(Adapted from Borjars & Burridge, 2010)

**Table 1-5 Principal parts of irregular verbs**

**Irregular Verbs (past and past participle forms for irregular verbs do not end with *-ed*)**

Base Form	Past	Past Participle
be	was, were	been
break	broke	broken
go	went	gone
put	put	put

(Adapted from Borjars & Burridge, 2010)

<b>Examples:</b>	<b>Base (Regular)</b>	I play.
	<b>Past</b>	I played.
	<b>Present participle</b>	I am playing.
	<b>Past participle</b>	I have played.
	<b>Base (Irregular)</b>	I drink.
	<b>Past</b>	I drank.
	<b>Present participle</b>	I am drinking.
	<b>Past participle</b>	I have drunk.

### 2.3.3 The voice of verbs

Voice of verb shows the relation of the subject whether the subject performs or receives the action of the verb. The voice of verb can be active or passive. The active voice occurs when the subject does the action and the passive voice occurs when the subject receives the action.

<b>Examples:</b>	<ul style="list-style-type: none"> <li>• <b>Active:</b> My son <i>made</i> his bed.</li> <li>• <b>Passive:</b> The bed <i>was made</i> by my son.</li> </ul>
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### 2.3.4 The moods of verbs

Mood is a verb property that is expressed through the sentence's verbs and grammatical structure. The grammatical mood conveys the speaker's attitude about the state of being and what the sentence describes. There are three moods in English and a verb can express any one of these three moods. The indicative mood makes a statement of factuality and reality, asks a question or expresses an opinion. The imperative mood expresses a command or request. The subjunctive mood indirectly expresses a demand, recommendation, suggestion, statement of necessity, or a conditional or immaginary situation.

**Examples:**

- **Indicative:** A dog *jumps* over the fence.
- **Imperative:** *Open* the door.
- **Subjunctive:** I wish I *were* there with you to celebrate your special day.

**2.4 Adjectives**

An adjective is a part of speech that describes or modifies nouns or pronouns by giving a descriptive or specific detail. An adjective typically refers to qualities or states (relating to things such as *shape*, *taste*, *size* or judgments such as *good/bad*, *beautiful/ugly*, *big/small*) and also refers to comparisons. Most adjectives have three degrees of form: (1) the positive form which cannot be used to make any comparison, (2) the comparative form which shows two things being compared and is inflected with “-er”; and (3) the superlative form which shows three or more things being compared and is inflected with “-est” as in *funnier/funniest* and *taller/tallest*. Typically, comparative and superlative adjectives end with “-er” or “-est”; however, some adjectives can be made comparative and/or superlative by being modified by more or most which applies to longer words as in *more beautiful* and *the most beautiful*. There are two irregular comparative and superlative forms of adjectives: *good, better, best* and *bad, worse, worst*.

**Examples:**

- **Positive:** She is very *funny*.
- **Comparative:** She is *funnier* than my sister.
- **Superlative:** She is *the funniest* person in my class.

**2.4.1 Adjective questions**

An adjective usually answers at least one of a few different questions about the noun or pronoun that it is modifying: “What kind?” or “Which?” or “How many?” or “Whose?” (O’Brien, 2012; Pinitsakkul, 2007)

**Examples:**

- |            |   |
|------------|---|
| What kind? | I watched a <i>romantic</i> film.<br>“film” is a noun, and “ <i>romantic</i> ” is an adjective that modifies “film.” It tells us what kind of film the person watched.                                      |
| Which?     | Only two students passed the <i>midterm</i> examination.<br>“examination” is a noun, and “ <i>midterm</i> ” is an adjective that modifies “examination.” It tells us which examination we’re talking about. |
| How many?  | She ate <i>three</i> kinds of fruit.<br>“kinds” is a noun, and “ <i>three</i> ” is an adjective that modifies “kinds.” It tells us how many kinds of fruit that she ate.                                    |

Whose?	She drove <i>Steve's</i> car. “car” is a noun, and “ <i>Steve's</i> ” is an adjective that modifies “car” (“ <i>Steve's</i> ” is a possessive noun functioning as an adjective). It tells us whose car that she drove.
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### 2.4.2 The position of adjectives

An adjective can occur in two positions in a phrase; before the noun or being called attributive position and following any form of the verb be and similar verbs or linking verbs when we describe the subject of a sentence which is called predicative position. (Beaumont & Granger, 1992; Börjars & Burridge, 2010; Delahunty & Garvey, 2010; Eastwood, 1992; Gärdenfors, 2014; Wardhaugh, 1995)

- Examples:**
- **Attributive:** You have a *beautiful* garden
  - **Predicative:** Your garden is *beautiful*.

A few adjectives such as *asleep*, *alone*, *alive*, *awake*, *afraid*, *ill*, *well* can come after a verb, but not before a noun. We use other adjectives such as *sleeping* instead of *asleep*, *living* instead of *alive*, *frightened* instead of *afraid*, *sick* instead of *ill*, and *healthy* instead of *well*, before noun.

- Examples:**
- |                        |                   |                          |
|------------------------|-------------------|--------------------------|
| She is <i>asleep</i> . | $\longrightarrow$ | A <i>sleeping</i> woman. |
| He is <i>ill</i> .     | $\longrightarrow$ | A <i>sick</i> man.       |

### 2.4.3 Types of adjectives

There are different types of adjectives based upon their effect on a noun and what do they tell about the noun. There are six categories of adjectives: (Pinitsakkul, 2007)

(1) Qualitative adjectives: adjectives that describe the nature of a noun and give an idea about the characteristics of the noun: such as *round*, *green*, *thin*, *silk*, *heavy*, *honest*, *large*, *beautiful*, *ugly*, etc. by answering the question *what kind?*

- Examples:**
- |  |
|--|
| The little boy played with a <i>round</i> , <i>green</i> ball. |
| She wore a <i>thin silk</i> scarf round her neck.              |
| Mona Liza is a <i>beautiful</i> woman.                         |

(2) Quantitative adjectives: adjectives that show the amount or the approximate amount of the noun or pronoun by answering the question *how many?*

(2.1) Definite quantitative adjectives tell us the exact number of a noun such as *one*, *two*, *three*, *four*, *first*, *second*, *third*, etc.

**Examples:**

He has *three* pens.

My brother is the *first* one in the middle row.

Give me *one* piece of cake please.

(2.2) Indefinite quantitative adjectives tell the approximate amount, not the exact number of a noun such as *much*, *a little*, *some*, *any*, *no*, *most*, *half*, *all*, *whole*, *sufficient*, *enough*, *few*, *great*, etc. Adjectives of quantity are followed by singular uncountable nouns.

**Examples:**

They have finished *most* of the test.

She ate the *whole* cake.

I have *a few* friends in London.

(3) Possessive adjectives: adjectives that show the noun belongs to someone; there are seven possessive adjectives; *my*, *your*, *our*, *their*, *his*, *her*, *its*.

**Examples:**

This is *my* car.

*Your* book is on the desk.

*His* brother is waiting outside.

(4) Distributive adjectives: adjectives that add meaning to the reader's understanding of the noun they precede, such as *every*, *each*, *either another*, *other*, etc.

**Examples:**

*Each* student is very friendly.

They speak to *another* person.

*Neither* proposal was accepted.

(5) Interrogative adjectives: adjectives that ask questions about nouns or in relation to nouns, such as *where*, *what*, *which*, *whose*.

**Examples:**

*Which* book do you prefer?

*Where* is your office?

*What* color is your fence?

(6) Demonstrative adjectives: adjectives which point out or indicate a particular noun or pronoun using the adjectives, such as *this*, *these*, *that*, *those*.

**Examples:** *That man is very good-looking.*  
*I really like *these* shirts.*

#### 2.4.4 Order of adjectives

When two or more adjectives come before a noun, we have to decide in what order to put them. This depends on the meaning of the adjectives. See table 1-6:

<b>Table 1-6 Order of adjectives</b>									
Deter-miner	How Good?	How big? (size)	How old? (age)	What shape? (shape)	What color? (color)	Where from? (origin)	Made of? (material)	What kind? What for? (purpose)	Noun
a	-	small	-	-	green	-	-	-	insect
-	-	-	-	-	-	Japanese	-	industrial	companies
a	wonderful	-	new	-	-	-	-	washing	powder
the	-	long	-	narrow	-	-	-	-	passage
a	nice	-	-	-	-	-	wooden	picture	frame

(Adapted from Eastwood, 1992)

#### 2.5 Adverbs

Adverbs are words used to modify verbs, adjectives, other adverbs, or whole sentences. Adverbs answer the questions How? When? Where? Why? or to what extent? (Dale, Glanze & O'Rourke, 1982; Eastwood, 1992; Hewings, 2005; Nelson, 2001, 2011; O'Brien, 2012)

<b>Examples:</b>	<b>How?</b>	She smiles <i>beautifully</i> . “ <i>beautifully</i> ” modifies “smiles”
	<b>When?</b>	<i>Last week</i> , she went to the shop. “ <i>Last week</i> ” modifies “went”
	<b>Where?</b>	She had dinner at <i>the restaurant</i> . “ <i>the restaurant</i> ” modifies “had”
	<b>Why?</b>	I smile <i>because he makes me feel good</i> . “ <i>because he makes me feel good</i> ” answers why does she smile?
	<b>To what extent?</b>	She drove <i>very</i> slowly. “ <i>very</i> ” modifies “slowly”

Adverbs mostly are formed by adding “-ly” to an adjective such as *certain/certainly, exact/exactly, soft/softly* but some adjectives end in “-ly” as *costly, deadly, friendly, kindly, lively and so on*. However, some adverbs referring to time and place have no distinctive ending, including *afterwards, now, soon, today, inside, etc.* Some words such as *hard and fast* can be used as both adverbs and adjectives. Adverbs are most commonly used to modify a verb, such as *sings beautifully*, an adjective, such as *very hot* and another adverb, such as *fairly slowly*.

### 2.5.1 Positions of adverb

There are three main positions for adverbs: front, middle, and end.

(1) Front position: adverbs located at the beginning of a sentence before the subject.

**Examples:** *Sometimes I get up very late.*  
*Perhaps she will call me tonight.*

(2) Middle position: adverbs that occur after the first auxiliary between the subject and verb or immediately after *be* as a main verb.

**Examples:** *He is just finishing his meal.*  
*I really like sunflowers.*

(3) End position: adverbs located at the end of a sentence after the verb.

**Examples:** *My dog is waiting patiently.*  
*I like this book very much.*

### 2.5.2 Comparative adverbs and superlative adverbs

Some adverbs exhibit three forms including the base, the comparative and the superlative forms.

**Table 1-7 Comparative adverbs and superlative adverbs**

Base Form	Comparative form (-er)	Superlative form (-est)
hard	harder	hardest
fast	faster	fastest

**Examples:** *Can't you drive faster?*  
*He works harder than before.*

However, some adverbs use the words more and most in expressing comparison.

**Table 1-8 More and Most**

Base Form	Comparative form	Superlative form
easily	more easily	most easily
carefully	more carefully	most carefully

**Examples:** He finished his second task *more easily* than the first.  
She drives *the most carefully*.

In addition, some adverbs are presented in irregular forms.

<b>Table 1-9 Irregular forms</b>		
<b>Base Form</b>	<b>Comparative form (-er)</b>	<b>Superlative form (-est)</b>
well	better	best
badly	worse	worst
far	farther/further	farthest/furthest

**Examples:** You have made *the best* decision.  
That was *the worst cake* I've ever eaten.

### 2.5.3 Types of adverbs

Adverbs are categorized into the following categories:

(1) Adverbs of time: adverbs which state “*when*” something happens or “*when*” it is done, such as *now, then, soon, tomorrow, yesterday, today, tonight, again, early, yesterday, etc.*

**Examples:** She got up *early* this morning.  
I am going to Singapore *tomorrow*.

(2) Adverbs of place: adverbs which tell about the place of action, a direction, “*where*” something happens or “*where*” something is done, usually go in the end position, such as *here, there, near, somewhere, outside, ahead, on the top, at some place, etc.*

**Examples:** They will come *here*.  
My son is playing *outside*.

(3) Adverbs of manner: adverbs which refer to how something happens or how an action is done, such as *carefully, clearly, dangerously, slowly, gracefully, correctly, etc.*

**Examples:** She speaks *slowly*.  
He was driving *dangerously*.

(4) Adverbs of frequency: adverbs which answer the question of “*how often* or *how many times*” the action occurs or occurred or will occur, such as *daily, sometimes, often, seldom, usually, frequently, always, ever, generally, rarely, monthly, yearly, etc.*

**Examples:** My children go to school *daily*.  
He comes to see me *frequently*.

(5) Adverbs of degree: adverbs which answer the question of “*how much*” and are used only to modify adjectives and adverbs, such as *very, much, rather, so, too, quite, almost, just, only, etc.*

**Examples:** I love you *very much*.  
She speaks French *quite well*.

## 2.6 Prepositions

Prepositions are simple words that are always used before a noun or a pronoun and show relationship between a noun or a pronoun and other words in the sentence. They are words like *in, on, at, to, over, up, under, below, between, behind, etc.*, or a compound preposition which is made up of more than one word like *because of, on account of, in spite of, in case of, in front of, instead of, aside from that, etc.* (Beaumont & Granger, 1992; Eastwood, 1992; Hewings, 2005; Nelson, 2001, 2011; O’Brien, 2012)

**Examples:** My book is *on* the desk.  
The school is *in front of* the post office.

### 2.6.1 Types of prepositions

Prepositions are divided into the following types:

(1) Prepositions for time: prepositions used for talking about time, such as *in, on, at, by, until, form, to/until, before, after, for, since, ago, etc.*

**Table 1-10 Prepositions for time**

Preposition	Nature of time	Example
in	• longer period of time such as season, months, years, decades, centuries, and other periods	• In the summer you can go to the beach. • I will go to college in July.
	• part of the day	• The weather will be cold in the evening.
	• how long something takes	• He can walk from the office to downtown in fifteen minutes.

**Table 1-10 Prepositions for time (continued)**

<b>Preposition</b>	<b>Nature of time</b>	<b>Example</b>
	• a period of time in the future	• I will finish in two hours.
on	• a particular day, date, or part of a particular day	• We're going to play football on Saturday. • The meeting will be held on Monday morning.
at	• exact points of time	• I wake up at 8:15am.
	• public holiday periods such as Christmas, Easter, etc., and weekends	• The whole family got together at Christmas to celebrate.
for	• period of time to say how long something continues in the past, present or future	• We were in London for one week last year.
for and since	• the present perfect verb tense	• I've been watching TV for three hours.
ago	• a period of time that is completed and begins at a point in the past up to now	• They left a few minutes ago. • We moved to Phuket six years ago.

(2) Prepositions for place: prepositions used for different places or can express either position or movement, such as: *in/inside*, *in/into*; *out of*; *outside*; *on*; *on top of*; *on/onto*; *of*; *at*; *by/beside*; *next to*; *near*; *to, from*; *towards*; *away*; *over*; *under*; *above*; *below*; *in front of*; *behind*; *up*; *down*; *across through*; *along past*; *among*; *between*; *opposite*; *around/round*; *at*; *etc.*

**Table 1-11 Prepositions for place**

<b>Preposition</b>	<b>Nature of place</b>	<b>Example</b>
in	• something around, on all sides, three-dimensional	• She is swimming in the pool.
	• a place as a point	• We went for jogging in the park.
	• town/country	• She lives in Bangkok.
	• inside a building	• I am waiting in the pub.
on	• a place as a surface	• The newspaper is on the table.
	• floor	• His bedroom is on the second floor.
	• name of road or street (American English)	• She lives on Fifth Avenue.
at	• a place as a point	• Please sit at my desk.

**Table 1-11 Prepositions for place (continued)**

Preposition	Nature of place	Example
at	• a place as a point	• Please sit at my desk.
	• events	• I met him at the party.
	• house/address	• See you at Nick's house.
	• the usual purpose of the building or place	• He was at the cinema last night.

### 2.6.2 Prepositional phrases

A prepositional phrase is a group of words beginning with a preposition and ending with an object of the preposition. An object of the preposition can be a noun or pronoun that follows the preposition such as “Tom looks *at Jim's new car*” and “The fruit cake fell *onto the floor*.”

(1) Types of prepositional phrases: the major meanings of the prepositional phrases are summarized as follows:

(1.1) Place (location/direction/relative)

**Examples:**

We are travelling *to Paris*.

Martin comes *from Canada*.

He leans *against the door*.

(1.2) Time/duration

**Examples:**

We're leaving *at 5 p.m.*

My mother will arrive *before the weekend*.

We have a party *on Friday*.

(1.3) Cause/purpose

**Examples:**

He does it *for his family*.

She succeeded *through hard work*.

He is suffering *from an injury*.

(1.4) Accompaniment

**Examples:**

He arrived *with his friends*.

She won't go anywhere *without her laptop*.

My children never read anything *except J.K.Rowling books*.

(2) Functions of prepositional phrases: all of the words in prepositional phrases can function as an adjective or adverb.

(2.1) An adjective: if the prepositional phrase is describing a noun, the phrase functions as an adjective.

**Examples:**

The book *with leather covers* is on my desk.

“*with leather covers*” modifies the noun “book,” so it is functioning as an adjective.

(2.2) An adverb: if the prepositional phrase is describing a verb, adverb, or an adjective, then it is acting like an adverb.

**Examples:**

The dog runs *through my yard*.

“*through my yard*” modifies the verb “runs,” so it is functioning as an adverb.

## 2.7 Conjunctions

Conjunctions are words that link two or more words, phrases, clauses, or sentences together such as *and, but, or, nor, for, yet, so, although, because, since, unless, when, while, where, etc.* There are two types of conjunctions:

### 2.7.1 Co-ordinators

Co-ordinators link elements of equal grammatical status or units of the same category, like two noun phrases, two clauses and so on. The common co-ordinators include *for, and, nor, but, or, yet, so*.

**Table 1-12 The most common coordinating conjunctions**

Coordinating conjunction	Use	Examples
for	to link effect to cause	Mary left school early, <i>for</i> she was not feeling well.
and	to add related information	I did not like the Math class, <i>and</i> I did not like the Calculus class.
nor	to show rejection of two choices	She doesn't like anchovies, <i>nor</i> does she like pizza.
but, yet	to show contrast between two related ideas	Tony plays basketball well, <i>but</i> his favorite sport is tennis. Tim complained loudly about the heat <i>yet</i> continued to play golf every day.
or	to present a choice	You can study hard for the exam <i>or</i> you may fail.

**Table 1-12 The most common coordinating conjunctions (continued)**

Coordinating conjunction	Use	Examples
so	to link cause to effect	I want to work as an interpreter in the future, <i>so</i> I am studying Japanese and Italian at university.

(Source: Frechette, Collins &amp; National-Louis University, 2003)

### 2.7.2 Subordinating conjunctions

Subordinating conjunctions introduce a subordinate clause which gives more information in relation to the main clause to complete the thought. There are more subordinating than co-ordinating conjunctions, and the most common are: *although, because, if, before, how, once, since, till, until, when, where, whether, while, after, no matter how, provided that, as soon as, even if*. Multi-word subordinators include *as long as, as soon as, as though, except that, in order that, provided that, so long as, such that*.

- Example:**
- She did not go to school *because* she was ill.
  - I will call her *after* I reach my office.
  - I bought some cookies *while* I was coming home from school.
  - They played baseball *although* it was raining.
  - As far as* I know, this exam is extremely difficult.
  - She can do well in the exam *provided that* she works hard.

### 2.8 Interjections

Interjections express emotion or exclamation. They are an unusual part of speech because they are not grammatically related to the other words in the sentence. They usually stand alone or are set off by commas.

- Examples:**
- |                               |                             |
|-------------------------------|-----------------------------|
| <i>Oh no</i> , I lost my key. | <i>Ouch!</i> I hurt my leg. |
| <i>Oh</i> , she is here!      | <i>Wow</i> , that was cool! |

### Morphemes

A morpheme is the basic unit of analysis recognized in morphology or the minimal unit of grammatical analysis. (Bauer, 1983; Lyons, 1968; Matthews, 1974) It is the smallest unit that cannot be dissected further into smaller meaningful units which carry the fundamental meanings of a language that has grammatical function or meaning which makes up or composes the words. (Delahunty & Garvey, 2010) Morphemes can be classified into two types; a free morpheme and a bound morpheme.

### 1. A free morpheme

A free morpheme is the smallest unit that can occur on its own as a word or a word-form and does not have to be attached to another morpheme. *Boy*, for example, is a free morpheme that cannot add any other morpheme to associate meaning with *boy* and this word cannot reduce to a smaller word. Therefore, *boy* is a complete, meaningful word all by itself.

<b>Examples:</b>	un- <i>happy</i>	<i>care-ful</i>
	<i>like-d</i>	<i>pre-test</i>

The words “*happy, care, like, test*” are free morphemes.

Most roots in English are free morphemes. (McCarthy, 2002; Payne, 2011) A root is a morpheme that expresses the basic lexical meaning of a word, and cannot be further divided into smaller pieces. Roots are subdivided into free and bound subtypes; free roots and bound roots.

1.1 Free roots are those that have a pronounceable and meaningful “*bare form*”; a form that has no other morphemes attached to it, like *happy, care, like, test*.

1.2 Bound roots are roots that have no pronounceable and meaningful “*bare form*”; another morpheme is required in order for it to be a fully understandable word. The term “*duce*” for example, is a root because it expresses the basic meaning of many words and cannot be divided into smaller meaningful parts. However, because it cannot be used in discourse without a prefix and/or a suffix being added to it, as in *reduce, produce, and conduction*, it is a bound root.

### 2. A bound morpheme

A bound morpheme is the smallest that has meaning only when it is attached to some other unit as word parts. It cannot occur except in combination with other morphemes. *Sunny*, for example consists of two morphemes: one free morpheme (*sun*) and one bound morpheme (the suffix “-y”). Suffix “-y” can be meaningful only when it adds to another morpheme, such as *sandy, hairy, rainy or cloudy*. Bound morphemes are basic units that must be attached as word parts and the commonest types of bound morphemes in English are affixes.

<b>Examples:</b>	walk- <i>ed</i>	<i>care-ness</i>
	<i>dis-agree</i>	<i>un-do</i>
	“- <i>ed, -ness, dis-, un-</i> ”	are bound morphemes.

## Root, Base, and Stem

Apart from morphemes, there is another element which we will come across frequently, namely “*base*”, sometimes also referred to as “*root*” or “*stem*”, and these three terms “designate that part of a word that remains when all affixes have been removed.” (Bauer 1983) A distinction between these three terms has been established to not only avoid confusion but also to clearly separate from inflectional and derivational operations. (Bauer 1983, 2002; Plag 2003)

### 1. Base word

A base is a central meaningful element of the word and refers to a single morpheme or combination of morphemes to which either an inflectional or derivational affixes can be added to form a complete word. For example, the word *happy* functions as the base when the prefix “*un-*” and the suffix “*-ily*” are added to form *unhappily*. The word “*happy*” is a base word that can be used by itself and to which can be added different beginnings and endings to change its use or meaning, such as *unhappy*, *happiness* and *happily*. All bases are not stems or roots, but stems and roots may be bases.

### 2. Root word

A root word is a special kind of base word and is usually a free morpheme that cannot be analyzed further into morphemes neither by derivation nor inflection. Like a base word, it carries the main part of a word’s meaning which is more specific than a prefix or suffix that is attached in order to form a complete word in English.

In English, roots are classified into two kinds: (Jeffries & Mikulecky, 2012; PREL, 2008)

2.1 Roots that can stand alone as a word. In the word *unhappily*, for example, when you strip off all the affixes; the prefix “*un-*” and the suffix “*-ily*,” *happy* is what remains, and which functions as the root because it is cannot be further divided into meaningful parts.

2.2 Roots that cannot stand alone in English mostly come from other languages, such as Latin or Greek. For example, *struct* is a root word meaning “*build or form*.” However, *struct* is not a word on its own. To make this a word, for example, *construction*, *destruction*, *obstruction*, and other word parts must be added. There are a few root words, such as *meter*, *script*, and *port* that can stand alone. But for most root words, more letters must be added to form a usable word.

Below is a list of common roots that you can remember to help expand your vocabulary and increase your reading comprehension.

<b>Table 1-13 Commonly occurring Greek and Latin roots</b>			
<b>Root</b>	<b>Meaning</b>	<b>Origin</b>	<b>Examples</b>
aud	hear	Latin	audible, audience, audiophile, audiophile, audio-visual, audition, auditorium
cred	belief, faith		credentials, credit, credulous, incredible
dict	speak, tell	Latin	dictate, dictator, dictionary, indicate, predict
ject	toss, throw	Latin	dejected, eject, projectile, reject
min	little, small	Latin	minimal, minimum
mit, mis	send	Latin	emission, missile, mission, remit, transmit
manu	hand, make, do	Latin	manicure, manual, manufacture, manuscript
ped	foot	Latin	pedal, pedestal, pedestrian
pel	drive	Latin	compel, expulsion, propeller, repel
port	carry	Latin	deport, export, export, import, import, portable, support, transport
scrib, script	write	Latin	inscription, manuscript, scribble
spect	see	Latin	despise, inspect, respect, spectator
struct	build, form	Latin	construction, destruct, instruct
tract	pull, draw		attract, contract, traction, tractor
ven, vene, vent	come	Latin	convene, event, intervention, prevent
vert	turn, twist	Latin	controversial, convert, extrovert, introvert
astro	star	Greek	asteroid, astrology, astronaut
auto	self	Greek	autocrat, autograph, automobile, autonomy
bio	life	Greek	biography, biology, bionic, biopsy
geo	earth	Greek	geography, geology
meter	measure	Greek	barometer, thermometer
phon	sound	Greek	phoneme, phonograph, telephone

(Adapted from Elder, 2008; Stahl & Shiel, 1992)

### 3. The stem

A stem is a basic form, the fundamental element (free or bound morpheme, root morpheme or complex word) that is left after a single particular affix has been removed. A stem may be one root morpheme (a simple stem) e.g. “*sun*,” or of two root morphemes (a compound stem) e.g. “*sunset*,” or of a root morpheme with derivational affixes (a complex stem), e.g. “*sunny*.”

## Affixes

Affixes in English are bound morphemes that can be divided into sub-classes depending on whether they attach the stem. Depending on their position in a word, affixes are divided into three categories, namely prefixes, suffixes, and infixes. (Bauer, 1983; Crystal, 2008; Kastovsky, 1982; Plag, 2003; PREL, 2008) However, an infix is virtually unknown in English; therefore, only prefixes and suffixes will be discussed. The word part at the beginning of a root or base word is called a *prefix*. The word part at the end of a root or base word is called a *suffix*. Stahl & Kapinus (2001) estimate that more than half of all English words contain a familiar prefix or suffix or are compound words.

### 1. Prefixes

A prefix is a meaningful part of a word that is added to the beginning of a root or base word and that changes its meaning. Prefixes have meanings, and they add their meanings to the meaning of the root or base word e.g. the word *impolite*, the base word is *polite*, by adding prefix “*im-*,” meaning “*not*,” the meaning changes to “*not polite*.”

Provided below is a list of common prefixes that you can remember to help expand your vocabulary and increase your reading comprehension.

**Table 1-14 The most common prefixes**

Rank	Prefix	Definition	Examples
1	un	not, opposite, reverse of	unclear, undemocratic, unhappy, unafraid, unnecessary, unsafe, unusual
		remove something	undress, unleash, unmask, unscrew, uncover, unlock
2	re	again, back	reapply, recede, redesign, reintroduce, regress, repaint, return
3	in, il, im, ir	not, opposite of	inappropriate, inconceivable, intolerant, illegal, illegible, illegitimate, impatient, impossible, impolite, indirect, irregular, irrelevant, irresponsible, invisible
4	dis	not, opposite of	discomfort, discover, disengage, dislike
5	en, em	cause to, in, cover	empathy, enjoy, entangle

<b>Table 1-14 The most common prefixes (continued)</b>			
<b>Rank</b>	<b>Prefix</b>	<b>Definition</b>	<b>Examples</b>
6	non	not, opposite of	nonfiction, nonresident, nonsense, nonstick, nonstop, nonviolent
7	in,im	in, into	incorporate, include, inhale, inside
8	over	above, beyond, too much	overactive, overdue, overgrown, overpriced
9	mis	wrongly, badly	misbehave, miscalculate, misconduct, misconstrue, mistake, misunderstand
10	sub	under, beneath, lower	subcontract, subject, submarine, subway
11	pre	before, prior	predict, prehistoric, prepare, preview
12	inter	among, between	interaction, intergalactic, international, internet, interracial, interstate, interwoven
13	fore	before, in front of	forearm, forenoon, foresee, foreshadow
14	de	downward, undo, opposite of	deactivate, decommission, decrease, decriminalize, deform, degrade, depart, descent
15	trans	across, change	transfer, transgender, translate, transport
16	super	above, beyond	superman, supermarket, supernatural, supervise
17	semi	half	semianual, semicircle, semiconscious
18	anti	against, opposed	antibody, antidepressant, antifreeze, antinuclear, antisocial, antiwar, anti-Western
19	mid	middle	midnight, midsummer, midway, midyear
20	under	too little, below	underfed, underneath, underpaid
21	dis	reverse of	disagreement, disapprove, dislike, disqualify
		remove something	disambiguate, disarm, disenfranchise, dislodge
22	extra	beyond	extraterrestrial, extra-curricular, extra-mural, extra-sensory
23	post	after	postgraduate, postcolonial, postwar
24	pre	before	predetermined, prewar, preset
25	pro	In favor of	prolife, prodemocracy, pro-Europe

(Adapted from Nelson, 2011; PREL, 2007, 2008; White, Sowell & Yanagihara, 1989)

## 2. Suffixes

A suffix is a meaningful part of word that is added to the end of a root or a base word that changes its meaning, although its new meaning is often close to the original meaning. A suffix provides basic structure and meaning to words, a suffix can:

- change the part of speech for example, *run (verb)* → *runner (noun)*.
- change a noun from singular to plural for example, *cat (singular)* → *cats (plural)*.
- change verb tense for example, *wait (present)* → *waited (past)*.
- establish a relationship or role of a person for example, *employer (a person, company, or organization that employs people)* → *employee (someone who is paid to work for someone else.)*
- show a difference in quantity for example, *less* → *lesser* and number for example, *few* → *fewest*.

Provided below is a list of common suffixes that you can remember to help expand your vocabulary and increase your reading comprehension.

**Table 1-15 The most common suffixes**

Rank	Suffix	Meaning	Examples
1	s, es ( <i>plural</i> )	more than one	suffixes, books, boxes
2	ed ( <i>past tense</i> )	in the past	walked, played, watched, helped
3	ing ( <i>present tense</i> )	in the present	waling, playing, watching, helping
4	ly ( <i>adverb</i> )	characteristic of	brilliantly, carefully, friendly, happily, loudly, lovely, quickly, slowly, smoothly
5	er, or, ist, ian, eer ( <i>noun</i> )	someone who; does/what/that /which	blender, defender, eraser, teacher, singer, actor, doctor, artist, cyclist, dentist, motorist, perfectionist, specialist, librarian, technician, engineer
6	er ( <i>adjective</i> )	comparative adjective	bigger, smaller, taller
7	ion, tion, sion ( <i>noun</i> )	state of being; quality; act	action, attention, caution, champion, conclusion, invitation, transition, vision
8	able, ible ( <i>adjective</i> )	can be, able to be, worthy of, capable of	achievable, comfortable, edible, enjoyable, incredible, profitable, likable, readable, reasonable, remarkable, sensible, terrible, visible

<b>Table 1-15 The most common suffixes (continued)</b>			
<b>Rank</b>	<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
9	al, ial, ic, ical <i>(adjective, noun)</i>	action or process relating to, pertaining to, relating to	accidental, comical, commercial, energetic, historic, historical, industrial, logical, magical, musical, physical, natural, proposal, refusal, regional, revival, royal, social, territorial
10	y <i>(adjective)</i>	characterized by, being or having, state or quality of	crazy, fruity, funny, milky, rainy, risky, sunny, sunny
11	ness <i>(noun)</i>	state of being	carelessness, cleanliness, coolness, dryness, goodness, happiness, kindness, smoothness, willingness
12	ity, ty <i>(noun)</i>	state of quality of	amplify, beautify, clarity, classify, curiosity, honesty, identify, loyalty, necessity, opportunity, publicity, purify, responsibility, severity
13	ment <i>(noun)</i>	condition of, action or process	apartment, argument, basement, contentment, development, embarrassment, enjoyment, environment, equipment, experiment, government, judgment
14	ic <i>(adjective)</i>	having characteristics of, pertaining to, relating to	comic, energetic, historic, public,
15	ous, eous, ious <i>(adjective)</i>	like, full of, state or quality of, characterized by	curious, furious, joyous, nervous, nutritious, religious
16	en <i>(verb)</i>	become, to make	broaden, deafen, fasten, frozen, loosen, ripen, sadden, strengthen, tighten, weaken, widen
	en <i>(adjective)</i>	relating to	brighten, chosen, eaten, enlighten, frighten, stolen
17	ive, ative, tive <i>(adjective)</i>	inclined to, having the nature of, somewhat like	active, creative, inventive, negative, positive, responsive, talkative

**Table 1-15 The most common suffixes (continued)**

Rank	Suffix	Meaning	Examples
18	ful (adjective)	full of, tending toward, notable for	beautiful, careful, colorful, eventful, fearful, grateful, hateful, hopeful, joyful, meaningful, successful, tuneful, useful, wonderful
19	less (adjective)	without	bottomless, careless, endless, homeless, hopeless, meaningless, painless, powerless, restless, wireless
20	est (adjective)	most	closest, fastest, smallest, smartest, strongest, tallest
21	ship (noun)	state of	citizenship, dictatorship, hardship, relationship
22	y (adjective)	quality of	cloudy, creepy, funny, rainy, sleepy
23	ise/ize (verb)	to make	economize, modernize, popularize, realize, terrorize
24	wards (adverb)	in the direction of	afterwards, backwards, onwards, upwards
25	wise (adverb)	manner, direction	anticlockwise, clockwise, health-wise, relationship-wise

(Adapted from Cooper, 2000; Plag, Dalton-Puffer & Baayen, 1999; Plag, 2002; PREL, 2007; Nelson, 2011; White, Sowell & Yanagihara, 1989)

## Inflectional and Derivational Morphemes

Bound morphemes have two types: inflectional and derivational. (Aronoff & Fudeman, 2011; Nagy, Osborn, Winsor & O'Flahavan, 1992; Radford, Atkinson, Britain, Clahsen & Spencer, 2009; Meyer, 2009; Wardhaugh, 1995)

### 1. Inflectional morpheme (Inflectional suffixes)

Inflectional suffixes are one type of grammatical morpheme that indicates certain grammatical properties. In English inflections are usually marked by suffixes. Regular English inflections are added to the majority of nouns, verbs, adjectives, and adverbs to indicate grammatical properties such as tense, number, and degree. Inflectional morphemes change the form of a word without changing either its category or its meaning and are always suffixes and the last morphemes of a word. *Birds*, for example, suffix “-s” is added to the noun *bird* to indicate more than one bird.

There are eight regular inflectional morphemes in English (DeCapua, 2008; Delahunty & Garvey, 2010; Fromkin, Rodman & Hyams, 2003; Meyer, 2009) as shown in Table 1-16:

<b>Table 1-16 The eight English inflectional morphemes</b>			
<b>Morpheme</b>	<b>Grammatical Function</b>	<b>Attaches to</b>	<b>Example</b>
-s	plural	noun	dogs
-'s	possessive	noun	dog's house
-s	third person singular	verb present tense	She cries.
-ed	regular past tense	verb	She cried.
-ed	regular past participle	verb	She has cried.
-ing	present participle	verb	She is crying.
-er	comparative	verb	shorter
-est	superlative	adjective/adverb adjective/adverb	shortest
-s	plural	noun	dogs

(Adapted from DeCapua, 2008; Delahunty & Garvey, 2010; Fromkin, Rodman & Hyams, 2003; Meyer, 2009)

## 2. Derivational morphemes

Derivational affixes may be either prefixes or suffixes and are often change grammatical classes of words such as changing words to be nouns, verbs, adjectives and adverbs. For example the noun *child* can be extended to *childhood* (state of being a child) or add the suffix “-ish” to form an adjective in the word *childish* (of or relating to a child). In English all prefixes are derivational affixes and the term *derivation* is used for any word containing at least one derivational suffix or prefix.

The derivational affixes and its consequential creation of a new lexeme can be divided into two main categories: class-maintaining and class-changing. (Adams, 1973; Bauer, 1983)

2.1 Class-maintaining affixes create a derivative; new lexemes formed by derivational affixes, which belong to the same word class as the original base or root as in *friendship* (*noun*). Here, “-ship” is added to the noun base and does not change the form of “friend.” Some examples of class-maintaining affixes are shown in the Table 1-17:

<b>Table 1-17 Some examples of class-maintaining affixes</b>		
<b>Affixes</b>	<b>Base</b>	<b>Prefix applied</b>
mini-	noun	minibar, minicomputer, miniskirt
step-	noun	stepdaughter, stepfather, stepmother, stepson
de-	verb	decapitate, deescalate
extra-	adjective	extraordinary, extrasensory
fore-	noun ,verb	foreground, forelock, foreman ( <i>noun</i> ) forecast, forewarn ( <i>verb</i> )
re-	noun, verb	rearrangement, re-election ( <i>noun</i> ) reconfigure, recycle, resist ( <i>verb</i> )

**Table 1-17 Some examples of class-maintaining affixes (continued)**

Affixes	Base	Prefix applied
in-	noun, adjective	indefinite, insane, intolerable, irreverent (adjective) in-joke, in-language, in-state (noun)
mid-	noun, adjective	mid-Victorian (adjective) mid-morning, mid-November (noun)
-ess	noun	actress, stewardess
circum-	verb, adjective	circumnavigate, circumscribe (verb) circumjacent, circum polar (adjectives)
inter-	nouns, verbs, adjectives	interdependence (noun), intermix (verb), interchangeable (adjective)
-hood	noun	childhood, manhood
-ship	noun	friendship, leadership
-ish	adjective	reddish, greenish

(Adapted from Bauer, 1983; Fromkin, Rodman & Hyams, 2003)

2.2 Class-changing affixes change the word class of the word to which they are added as in *friendly* (*adjective*), “-ly” is added to the noun base “*friend*” and becomes the adjective form. The most common examples of class-changing derivational process in English as shown in Table 1-18:

**Table 1-18 Most common patterns of derivational process in English**

Word classes	Suffix	Suffix applied
verb-to-noun	-ance -ation -ment -er	deliver → deliverance civilize → civilization govern → government write → writer
adjective-to-noun	-ness -cy -ce -ness -ist	slow → slowness excellent → excellency dependent → dependence happy → happiness social → socialist
noun-to-verb	-fy, -ify -ize -ate	glory → glorify memory → memorize origin → originate
adjective-to-verb	-ise -en	modern → modernise short → shorten

**Table 1-18 Most common patterns of derivational process in English  
(continued)**

word classes	suffix	suffix applied
noun-to-adjective	-al -ate -en -ful -less -ly -ous -y	education → educational passion → passionate wood → wooden beauty → beautify colour → colourless friend → friendly poison → poisonous sun → sunny
noun-to-adjective	-ly -ous -y	friend → friendly poison → poisonous sun → sunny
verb-to-adjective	-able -ed -ive	drink → drinkable continue → continued create → creative
adjective-to-adverb	-ly -ward -wise	quiet → quietly after → afterward like → likewise

(Adapted from Bauer, 1983; Fromkin, Rodman & Hyams, 2003; Meyer, 2009; Plag, 2002)

## Compounds

A compound word is usually defined as a word made up of two or more other bases. It is made up of free morphemes as in *keyword*, *blackboard* or bound morphemes such as *biology* or *thermometer*. Sometimes compounds are written as one word, such as *daylight*, *sunburn*, sometimes as hyphenated words such as *easy-going*, *in-group* and sometimes as two separate words such as *life insurance*, *bath towel*. Compounds may be endocentric or exocentric. An endocentric compound consists of a head, that is, one of the elements that can substitute for one of its component parts that contain the basic meaning of the whole compound, and modifiers, which restrict this meaning, such as *a girlfriend*, where *friend* is the head and *girl* is the modifier; therefore, *a girlfriend* means a particular kind of friend. The meaning of an endocentric compound is fairly transparent. In contrast an exocentric compound lacks of a head and has a meaning which cannot be said to derive from the sum of its parts and cannot be transparently guessed from its constituent parts. For example *hotdog* does not refer to a particular type of dog but refers to a type of food.

There are different kinds of English compounds. According to Bauer (1983) and Wardhaugh (1995), English compounds are classified into compound nouns, compound verbs, compound adjectives, compound adverbs and Neo-classical compounds.

### 1. Compound nouns

Compound nouns are obtained by putting two words together which are formed from various combinations:

noun + noun:	girlfriend, newspaper, paper clip, blood-test
verb + noun:	cut-throat, pickpocket, breakfast, birth control
verb + verb:	sleepwalk, wet dream, make-believe
verb + particle:	put-down, walk in, hang on
particle + noun:	overcoat, undertake
adjective + noun:	fast-food, greenhouse, full moon, dry cleaning

### 2. Compound verbs

Most of the compound verbs in English are formed by conversion or by the process known as backformation, which is by subtracting an affix thought to be part of the word. Compound verbs are formed as follows:

noun + verb:	sky-dive, carbon-date, color-code
noun + noun:	breath-test
particle + verb:	outlast, overbook, undermine, over look
verb + verb:	freeze-dry, dare say, test-market
adjective + verb:	fine-tune, soft-land, double-book, dry-clean
adjective + noun:	brown-bag, bad-mouth

### 3. Compound adjectives

Compound adjectives are formed by several different patterns as follows:

noun + verb:	man-eating, man-made, breathtaking, color-blind
noun + adjective:	duty-free, sugar-free, card carrying, ready made
adjective + adjective:	better-sweet, red-hot, icy-cold, white-sweet, bitter-sweet
adjective + verb:	good-looking, easy-going
adjective + noun:	grey-collar, red-brick, solid-state
particle + noun:	in-depth, offside, underground, before-tax
particle + verb:	hard-working, well-read
verb + particle:	see-through, wrap-around, tow-away
verb + adjective:	fail-safe
verb + noun:	turn-key, switch-button
particle + adjective:	wide awake, oversensitive

#### 4. Compound adverbs

Compound adverbs are mostly formed by adding the suffix “-ly” to the compound adjectives or may form by other pattern are shown as follows:

compound adjective + -ly:	uprightly, cross-modally
other pattern:	overnight, double-quick, off-hand

#### 5. Neo-classical compounds

Neo-classical compounds are formed by Greek or Latin origin combinations. Some examples of this kind of compound are shown in Table 1-19:

<b>Table 1-19 Some Neo-classical compounds</b>		
<b>Form</b>	<b>Meaning</b>	<b>Example</b>
astro-	space	astrology, astronomy, astronaut
bio-	life	biology, biochemistry
geo-	earth	geology, geography
hydro-	water	hydrogen, hydrology
tele-	distant	telephone, television
-cacy	rule	democracy, stratocracy
-graphy	write	bibliography, thermography
-logy	science of	astrology, anthropology
-scope	look at	telescope, stereoscope

(Adapted from Plag, 2002)

### Summary

In this chapter, the basic element of an English word was discussed primarily designed to acquaint learners with the basic composition of words or the structural analysis that is commonly used. Definitions and examples of the different parts of speech, morphemic elements, including morphemes, affixes, roots, stems and bases, Greek and Latin roots, inflectional and derivational morphology and compounds have been discussed. A word is a freestanding element that is composed of one or more morphemes. Parts of speech sometimes help the readers to understand the grammar and meaning of the sentence. A morpheme is the individual unit of meaning in the word which can be categorized into free and bound morphemes. Affixes are bound morphemes that are attached to a base (root or stem). A root is a morpheme to which other morphemes are attached to build new words that cannot be divided into meaningful parts, a stem is an element to which additional morphemes are added and a base is an element that can consist of a single root morpheme or more than one morpheme. Greek and Latin roots often appear in English words. Derivational morphemes are added to create new words, whereas inflectional morphemes indicate grammatical properties. Compounds refer to the production of words by combining two or more free morphemes.

## Exercises

### **Exercise 1-1: Parts of speech**

**Directions:** Write the part of speech and definition for each underlined word as it is used in the sentence.

1. Please turn on the light; I want to read a book. Part of speech: \_\_\_\_\_  
Definition: \_\_\_\_\_
2. She has an oval face with light brown hair. Part of speech: \_\_\_\_\_  
Definition: \_\_\_\_\_
3. Did you light the fire by a lighter or matches? Part of speech: \_\_\_\_\_  
Definition: \_\_\_\_\_
4. Harry Potter is my favorite book. Part of speech: \_\_\_\_\_  
Definition: \_\_\_\_\_
5. Chocolate cake is my daughter's favorite. Part of speech: \_\_\_\_\_  
Definition: \_\_\_\_\_
6. Definition: \_\_\_\_\_

### **Exercise 1-2: Commonly occurring Greek and Latin roots**

**Directions:** Write the root and meaning for each root.

- |                |             |                |
|----------------|-------------|----------------|
| 1. biology     | Root: _____ | Meaning: _____ |
| 2. predict     | Root: _____ | Meaning: _____ |
| 3. portable    | Root: _____ | Meaning: _____ |
| 4. thermometer | Root: _____ | Meaning: _____ |
| 5. telephone   | Root: _____ | Meaning: _____ |

### **Exercise 1-3: Commonly occurring Greek and Latin roots**

**Directions:** Use one of the words from the list to complete each sentence.

*biology / portable / predict / telephone / thermometer*

1. This \_\_\_\_\_ printer is light and small enough to be easily carried everywhere.
2. To \_\_\_\_\_ is to say that an event or something will happen in the future.
3. His new book deals with the reproductive \_\_\_\_\_ of the gorilla.
4. A \_\_\_\_\_ is the system of communication that you use to have a conversation with someone when you are too far apart to be heard directly.
5. A piece of equipment that measures the temperature of the body is called a \_\_\_\_\_.

**Exercise 1-4: Most common prefixes****Directions:** Write the prefix and meaning for each prefix.

- |               |               |                |
|---------------|---------------|----------------|
| 1. unlock     | Prefix: _____ | Meaning: _____ |
| 2. impolite   | Prefix: _____ | Meaning: _____ |
| 3. nonviolent | Prefix: _____ | Meaning: _____ |
| 4. overdue    | Prefix: _____ | Meaning: _____ |
| 5. subway     | Prefix: _____ | Meaning: _____ |

**Exercise 1-5: Most common prefixes****Directions:** Use one of the words from the list to complete each sentence.*impolite / nonviolent / overdue / subway / unlock*

1. To \_\_\_\_\_ means to open the lock on a door, box etc.
2. It is \_\_\_\_\_ or not polite to point at people.
3. The protest demonstration was \_\_\_\_\_, not using or not involving violence.
4. I will be fined because the library books are \_\_\_\_\_, and not returned by the time expected.
5. A railway system that runs under the ground below a big city is called a \_\_\_\_\_.

**Exercise 1-6: Most common suffixes****Directions:** Write the suffix, part of speech and meaning of each word.

- |                |                |                       |
|----------------|----------------|-----------------------|
| 1. friendly    | Suffix: _____  | Part of speech: _____ |
|                | Meaning: _____ |                       |
| 2. wonderful   | Suffix: _____  | Part of speech: _____ |
|                | Meaning: _____ |                       |
| 3. comfortable | Suffix: _____  | Part of speech: _____ |
|                | Meaning: _____ |                       |
| 4. government  | Suffix: _____  | Part of speech: _____ |
|                | Meaning: _____ |                       |
| 5. fasten      | Suffix: _____  | Part of speech: _____ |
|                | Meaning: _____ |                       |

**Exercise 1-7: Most common suffixes****Directions:** Use one of the words from the list provided to complete each sentence.*comfortable / fasten / friendly / government / wonderful*

1. To \_\_\_\_\_ is to close or join together the two parts of something.
2. The \_\_\_\_\_ is the group of people who are responsible for controlling a country or a state.
3. This is such a \_\_\_\_\_ bed which makes me feel physically relaxed.
4. I had a \_\_\_\_\_ time last night; it was a very pleasant time for me.
5. She who is very \_\_\_\_\_ behaves in a kind and pleasant way.

**Exercise 1-8: Roots, Prefixes, Suffixes****Directions:** Analyze the following words into root and affix (prefix or suffix). Write the definition and identify the part of speech of each word.

1. transport      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
2. dictate      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
3. intervention      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
4. deactivate      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
5. foresee      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_

**Exercise 1-9: Compound words****Directions:** Analyze the compound words in the following list into separate bases.

1. girlfriend      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
2. breakfast      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
3. sleepwalk      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
4. dry-clean      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
5. breath-test      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
6. overnight      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
7. bitter-sweet      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
8. astrology      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
9. biochemistry      First base: \_\_\_\_\_ Second base: \_\_\_\_\_
10. good-looking      First base: \_\_\_\_\_ Second base: \_\_\_\_\_

**Exercise 1-10: Compound words**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

**Column A**

1. \_\_\_\_ breath-test
2. \_\_\_\_ overnight
3. \_\_\_\_ biochemistry
4. \_\_\_\_ bitter-sweet
5. \_\_\_\_ astrology
6. \_\_\_\_ sleepwalk
7. \_\_\_\_ dry-clean
8. \_\_\_\_ good-looking
9. \_\_\_\_ breakfast
10. \_\_\_\_ girlfriend

**Column B**

- a. the first meal of the day
- b. a girl or a woman that somebody is having a romantic relationship with
- c. to walk around while you are asleep
- d. to clean clothes using chemicals instead of water
- e. a test used by the police to show the amount of alcohol in a driver's breath
- f. during or for the night
- g. bringing pleasure mixed with sadness at the same time
- h. the study of the positions of the stars and movement of the planets in the belief that they influence human affairs
- i. the scientific study of the chemistry of living things
- j. physically attractive

**Exercise 1-11: Compound words**

**Directions:** Use one of the words from the list to complete each sentence.

*astrology / biochemistry / bitter-sweet / breakfast / breath test / dry-cleaned / girlfriend / good-looking / overnight / sleepwalked*

1. Steve had lunch with his \_\_\_\_\_ at an Italian restaurant.
2. I prefer low-fat yogurt and fruit salad for my \_\_\_\_\_.
3. This dress must be \_\_\_\_\_ only.
4. My brother was given a \_\_\_\_\_ last night.
5. We decided to stay \_\_\_\_\_ in Chiangmai.
6. I can't remember that I \_\_\_\_\_ and talked last night.
7. My first love is a \_\_\_\_\_ memory.
8. I like \_\_\_\_\_ because it can answer questions about relationships, particularly love.
9. \_\_\_\_\_ is my favorite subject and I would like to extend my knowledge in this field.
10. She is very attractive and \_\_\_\_\_ .

**Exercise 1-12: Reading and vocabulary**

**Directions:** In the table below, fill in the blanks with the correct form of the word by using words from the text. If you are not sure of the correct form, check your dictionary.

Dolphins are interesting because they display almost human behavior at times. For example, they display the human emotions of joy and sadness. During training, when dolphins do something correctly, they squeal excitedly and race toward their trainer. When dolphins make a mistake, however, they droop noticeably and mope around their pool. Furthermore, dolphins help each other when they are in trouble. If one is sick, a dolphin sends out a message, and others in the area swim to help it. Dolphins push it to the surface of the water so that it can breathe. They stay with a dolphin for days or weeks—until it recovers or dies. They have also helped trapped or lost whales navigate their way safely out to the open sea. Dolphins are so intelligent and helpful, in fact, that the U.S. Navy is training them to become underwater bomb disposal experts. (Oshima & Hogue, 1991, 1999, p. 42)

Verb	Noun	Adjective	Adverb
interest	interest		-
-		emotional	emotionally
-		sad	sadly
	breath	breathy	-
correct	correction	corrective	

**Exercise 1-13: Structure of words**

**Directions:** Analyze the words from the text into root and affix (prefix or suffix). Write the definition and identify the part of speech of a word.

1. excitedly      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
2. helpful      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
3. sadness      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
4. underwater      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_
5. noticeably      Root: \_\_\_\_\_ Prefix: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Part of speech: \_\_\_\_\_ Definition: \_\_\_\_\_

**Exercise 1-14: Create the sentences**

**Directions:** Write sentences using the words provided.

1. excitedly: \_\_\_\_\_
2. recovers: \_\_\_\_\_
3. trapped: \_\_\_\_\_
4. underwater: \_\_\_\_\_
5. noticeably: \_\_\_\_\_

## Chapter 2

# Prefixes

### Introduction

Prefixes are powerful tools for building vocabulary because they can help unlock the meaning of thousands of words. In this chapter, the most common prefixes used in the English language and techniques on how they are effectively used will be discussed.

### Prefixes

Prefixes help to form longer words, but are not words in themselves. Prefixes are attached in front of a base or a root of a word, and are used to alter or modify its meaning. A root word usually has one distinct meaning and when a prefix is added in front of it, the meaning is changed. For example:



Prefixes will change word meaning, and in many cases, prefixes create words that can mean the opposite of the root word, some can suggest quantities, direction, location, or placement. Others can indicate particular fields of study.

### Derivational Prefixes

Prefixes in English are usually divided into class changing and class maintaining, but the vast majority of prefixes are class maintaining. Class changing prefixes are prefixes that change the part of speech of the base or root to which they are added, whereas class maintaining prefixes are prefixes that do not change the part of speech of the base or root to which they are added. (Bauer, 1983; Delahunty & Garvey, 2010; Wardhaugh, 1995; Zapata, 2000)

#### 1. Class-changing prefixes

**Table 2-1 Class-changing prefixes**

Prefix	Meaning	Base	Examples
a-	in the state of	blaze (v.) field (n.) flame (v./n.) shore (n.)	ablaze (adj.) afield (adv.) aflame (adv.) ashore (adv.)

**Table 2-1 Class-changing prefixes (continued)**

<b>Prefix</b>	<b>Meaning</b>	<b>Base</b>	<b>Examples</b>
a-	in the state of	sleep (v.) stir (v.) wash (v.)	asleep (adj.) astir (adj.) awash (adj.)
in-	in the state of	flight (n.) house (n.)	in-flight (adj.) in-house (adj./adv.)
on-	in the state of	air (n.) line (n.) screen (n.) site (n.)	on-air (adj. / adv.) online (adj.) on-screen (adj.) on-site (adj.)
be-	make, become	calm (adj.) little (adj.) friend (n.) moan (n.)	becalm (v.) belittle (v.) befriend (v.) bemoan (v.)
en-/em-	put in, on	case (n.) danger (n.) large (adj.) plane (n.) power (n.) rich (adj.) tomb (n.)	encase (v.) endanger (v.) enlarge (v.) enplane (v.) empower (v.) enrich (v.) entomb (v.)

## 2. Class-maintaining prefixes

### 2.1 Nouns

**Table 2-2 Class-maintaining prefixes: nouns**

<b>Prefix</b>	<b>Meaning</b>	<b>Base</b>	<b>Examples</b>
arch-	first, chief, head	rival	arch-rival
mal-	bad, wrong, not	function	malfuction
micro-	very small	biology	microbiology
mini-	smaller	skirt	mini-skirt
step-	related to a child or children through a second marriage	father	stepfather

## 2.2 Verbs

**Table 2-3 Class-maintaining prefixes: verbs**

Prefix	Meaning	Base	Examples
de-	the negative, reverse, opposite of	centralize	decentralize
un-	the negative, reverse, opposite of	cover	uncover
dis-	the negative, reverse, opposite of	agree	disagree

## 2.3 Adjectives

**Table 2-4 Class-maintaining prefixes: adjectives**

Prefix	Meaning	Base	Examples
a-	not, without	moral political typical	amoral apolitical atypical
con-	together, with	joined	con-joined
extra-	outside, beyond	marital sensory	extra-marital extra-sensory
extra-	very	thin	extra-thin

## 2.4 Nouns or verbs

**Table 2-5 Class-maintaining prefixes: nouns or verbs**

Prefix	Meaning	Base	Examples
fore-	before, in front of	ground ( <i>n.</i> ) lock ( <i>n.</i> ) tell ( <i>v.</i> ) see ( <i>v.</i> ) warn ( <i>v.</i> )	foreground forelock foretell foreseen forewarn
mis-	bad, wrong, not	direction ( <i>n.</i> ) fortune ( <i>n.</i> ) conduct ( <i>v.</i> ) direct ( <i>v.</i> ) lead ( <i>v.</i> ) trust ( <i>v.</i> )	misdirection misfortune misconduct misdirect mislead mistrust

**Table 2-5 Class-maintaining prefixes: nouns or verbs (continued)**

Prefix	Meaning	Base	Examples
re-	again	arrangement ( <i>n.</i> ) election ( <i>n.</i> ) advertise ( <i>v.</i> ) arrange ( <i>v.</i> ) elect ( <i>v.</i> )	rearrangement reelection re-advertise rearrange reelect

## 2.5 Nouns or adjectives

**Table 2-6 Class-maintaining prefixes: nouns, verbs or adjectives**

Prefix	Meaning	Base	Examples
ex-	former, at one time	president ( <i>n.</i> ) wife ( <i>n.</i> ) husband ( <i>n.</i> )	ex-president ( <i>n.</i> ) ex-wife ( <i>n.</i> ) ex-husband ( <i>n.</i> )
in-	in, on	country ( <i>n.</i> ) law ( <i>n.</i> ) put ( <i>v.</i> ) take ( <i>v.</i> ) credible ( <i>adj.</i> ) operable ( <i>adj.</i> )	in-country in-law input intake incredible inoperable
in-	not	definite ( <i>adj.</i> ) sane ( <i>adj.</i> ) visible ( <i>adj.</i> )	indefinite insane invisible
ex-	out, out of, from	orbital ( <i>n.</i> ) tract ( <i>n.</i> ) claim ( <i>v.</i> )	ex-orbital extract exclaim
mid-	the middle of	afternoon ( <i>n.</i> ) morning ( <i>n.</i> ) year ( <i>n.</i> ) Victorian ( <i>adj.</i> )	mid-afternoon mid-morning mid-year mid-Victorian

## 2.6 Verbs or adjectives

**Table 2-7 Class-maintaining prefixes: verbs or adjectives**

Prefix	Meaning	Base	Examples
circum-	around, all around	scribe ( <i>v.</i> ) navigate ( <i>v.</i> ) polar ( <i>adj.</i> ) stellar ( <i>adj.</i> )	circumstellar circumpolar circumnavigate circumscribe

## 2.7 Nouns, verbs, or adjectives

<b>Table 2-8 Class-maintaining prefixes: nouns, verbs, or adjectives</b>			
<b>Prefix</b>	<b>Meaning</b>	<b>Base</b>	<b>Examples</b>
co-	together, jointly	author ( <i>n.</i> ) chairman ( <i>n.</i> ) exist ( <i>v.</i> ) operate ( <i>v.</i> )	co-author co-chairman co-exist co-operate
co-	equally	equal ( <i>adj.</i> )	co-equal
counter-	against, in return	action ( <i>n.</i> ) culture ( <i>n.</i> ) claim ( <i>v.</i> ) attractive ( <i>adj.</i> ) clockwise ( <i>adj.</i> )	counteraction counterculture counterclaim counterattractive counterclockwise
dis-	the negative, reverse	information ( <i>n.</i> ) comfort ( <i>n.</i> ) believe ( <i>v.</i> ) agree ( <i>v.</i> ) appointed ( <i>adj.</i> ) bound ( <i>adj.</i> )	disinformation discomfort disbelieve disagree disappointed dis-bound
inter-	among, between	action ( <i>n.</i> ) dependence ( <i>n.</i> ) mix ( <i>v.</i> ) change ( <i>v.</i> ) digital ( <i>adj.</i> ) personal ( <i>adj.</i> )	interaction interdependence intermix interchange inter digital interpersonal
sub-	under, beneath secondary, lower secondary, repetition, not quite	way ( <i>n.</i> ) species ( <i>n.</i> ) divide ( <i>v.</i> ) contract ( <i>v.</i> ) conscious ( <i>adj.</i> ) marine ( <i>adj.</i> )	subway sub-species subdivide subcontract subconscious submarine

## The Most Common Prefixes

The most common prefixes used are as follows: (Blevins, 2001; Kieffer & Lesaux, 2007; Carroll, Davies & Richman, 1971; White, Sowell & Yanagihara, 1989)

## 1. Highest frequency

<b>Table 2-9 Highest frequency</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
un-	not, opposite of, contrary to	unaware, unbelievable, unhappy, unrest
re-	again, anew	redo, rebuild
	backwards, back	react, replay
in-/im-/ir-/il-	not	impossible, immobile, incapable, inactive, illegal, illogical, irregular, irrational
dis-	not	dishonest, disgraceful
	opposite of	discover, disfavor, dissimilar
	remove	discolor
en-/em-	put or go into	encage, embed
	cause to, to be	enable, embalm, endear
non-	not	nonexistent, non-fiction, non-negotiable, non-stick
under-	too little, below	underage, underpaid, underweight
in-/im-	in or into	implant, import, inbound, inject

## 2. High frequency

<b>Table 2-10 High frequency</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
over-	above, too much	overeat, overtime, overuse
mis-	bad, wrongly, failure, lack	misconduct, misfire, misunderstand, misuse
sub-	below, under	subsurface, subsoil, subway
	secondary	subplot
	less than complete	subhuman
pre-	before	prehistoric, prepay, preschool
inter-	between, among	interact, international
fore-	before, in front of	forerunner
de-	make opposite of	decriminalize
	remove	degrease
	reduce	devalue

### 3. Medium frequency

<b>Table 2-11 Medium frequency</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
trans-	across	trans-Atlantic
	change	transcribe
	through	transfer
super-	above, over	superhero, superimpose, supermodel
	superior	superfine
	excessive	supercharge, superego
semi-	half	semiannual, semicolon
	partial	semiconscious
	happening two times during	semimonthly
anti-	against, opposite	antibody, antigravity, antisocial, antiwar
mid-	middle	midnight, midstream, midyear
under-	beneath, below, less in degree	underage

### List of Prefixes by Level

Furthermore, Fry and Kress (2006) suggests what learners should know in order to unlock the meaning of hundreds of words classified into beginner level and intermediate to advanced levels of English language learning as follows:

#### 1. Beginner level prefixes

<b>Table 2-12 Beginner level prefixes</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
anti-	against	antifreeze, antisocial, antiwar
dis-	not, opposite	disagree, disappear, dishonest
ex-	former	ex-president, ex-student, ex-teacher
im-/in-	not	imbalance, immobilize, impossible
inter-	among, between	international, internet, interrupt
intra-	within	intramuscular, intranet, intrastate
micro-	small, short	microfilm, microphone, microwave
mis-	wrong, not	misbehave, misfortune, mistake
multi-	many, much	multicolored, multiply, multitude
non-	not	nonfiction, nonsense, nonstop
over-	too much	overactive, overdue, overpriced

<b>Table 2-12 Beginner level prefixes (continued)</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
post-	after	postdate, postpone, postscript
pre-	before	preamble, precaution, prefix
pro-	favor	pro-education, pro-trade, pro-war
pro-	forward	proceed, proclaim, progress
re-	again	redo, reheat, rewrite
re-	back	recall, replace, reply
sub-	under, below	submarine, subordinate, subzero
super-	above, beyond	superman, supermarket, supernatural
tele-	distant	telephone, telescope, television
un-	not	unable, uncomfortable, unhappy
under-	below, less than	undercover, underground, underpaid

## 2. Intermediate to advanced level prefixes

<b>Table 2-13 Intermediate to advanced level prefixes</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
after-	after	afternoon, aftershock, afterward
ambi-/amphi-	around	ambience, ambivalent, amphibian
auto-	self	autograph, automatic, automobile
be-	make	becalm, befriend, bewitch
bene-	good	benefactor, beneficial, benefit
cent-/centi-	hundred, hundredth	centigrade, centimeter, century
circu-	around	circulate, circumstance, circus
co-	together	collaborate, cooperate, coordinate
com-/con-	with	combine, compare, command
contra-	against, opposite	contradict, contrary, contrast
counter-	against, opposite	counteract, countermand, counterproposal
de-	down, away	decrease, deduct, depart
de-	not, opposite	deform, deplete, deactivate
dec-	ten	decade, December, decennial
deci-	tenth	decibel, decimal, decimeter
di-	two	dilemma, dioxide, diploma
dia-	through, across	dialect, dialogue, diameter
du-/duo-	two	dual, duet, duo

**Table 2-13 Intermediate to advanced level prefixes (continued)**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
dys-	bad	dysentery, dysfunctional, dystrophy
e-	out, away	edict, eject, erupt
equi-	equal	equation, equation, equinox
eu-	good	eulogy, euphoria, euthanasia
giga-	billion	gigabyte, gigahertz, gigawatt
hemi-	half	Hemicycle, hemisphere, hemistich
hept-	seven	heptagon, heptameter, heptarchy
hetero-	different	heterodox, heteronym, heterosexual
hex-	six	hexagon, hexagram, hexameter
homo-	same	homogeneous, homophone, homosexual
hyper-	excessive	hyperactive, hypercritical, hypersensitive
hypo-	under, too little	hypodermic, hypothermia, hypothesis
il-	not	illegal, illegible, illiterate
ir-	not	irreconcilable, irregular, irresponsible
kilo-	thousand	kilobyte, kilogram, kilometer
macro-	large, long	macrobiotic, macroeconomics, macron
magni-	great, large	magnificent, magnify, magnitude
mal-	bad	maladjusted, malevolent, malfunction
mega-	large, million	megacycle, megaphone, megawatt
meta-	change	metamorphosis, metaphor, metastasis
milli-	thousand	millennium, milligram, million
mon-/mono-	one	monarch, monocular, monogamy
neo-	new	neoclassical, neologism, neonatal
omni-	all	omnibus, omnificent, omnipotent
pan-	all	pandemic, pandemonium, panorama
para-	almost	paralegal, paramedic, paraprofessional
per-	through	permit, pervade, percolate
peri-	around	perimeter, peripatetic, periscope
poly-	many	polygamy, polyglot, polysyllabic
prot-	first, chief	protagonist, proton, prototype
pseudo-	false	pseudo classical, pseudointellectual, pseudonym

<b>Table 2-13 Intermediate to advanced level prefixes (continued)</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
quadra-	four	quadrangle, quadrant, quadruple
quint-	five	quintessential, quintet, quintuplet
self-	self	selfish, self-respect, self-taught
semi-	half	semiannual, semicircle, semiconscious
sept-	seven	September, septet, septuagenarian
syn-	together	synchronize, syndrome, synonym
tri-	three	triangle, tricycle, triplet
ultra-	beyond	ultraconservative, ultramodern, ultranationalist
uni-	one	unicorn, uniform, universe

## Semantic Prefixes Classes

Prefixes fall into a number of semantic classes in English, depending upon the meaning that they contribute to the root. They are classified into groups as shown below: (Brinton & Brinton, 2009; Elder, 2008; McWhorter & Sember, 2009; Minkova & Stockwell, 2009; Plag, 2002; White, Sowell & Yanagihara, 1989)

### 1. Prefixes that indicate number or amount

<b>Table 2-14 Prefixes that indicate number or amount</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
uni-	one, single	unicorn, unicycle, unidirectional, unification, uniform, unilateral, unisex, universe,
bi-/di-	twice or two	biannual, bicycle, biennial, bifocal, bifurcation, bilateral, bilingual, bipolar, bisulfate, dichloride, dioxide, disyllabic, ditransitive
mono-	one, single	monarchy, monochrome, monogamy, monograph, monologue, monomial, monomorphic, monopoly, monosyllabic, monotheism, monotone
du-/duo-	two	duel, duet, duo
tri-	three	triad, triangle, triathlon, triathlon, tricycle, tridimensional, trio, triple, triplet, tripod, triumvirate

**Table 2-14 Prefixes that indicate number or amount (continued)**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
tetra-	four	tetrameter
quadr-/quadri-	quadr-/quadri-	quadrangle, quadrant, quadrilateral, quadriplegic, quadruplet
quart-	four	quarter, quarterly, quartet, quartile
pent-	five	pentacle, pentagon, pentameter, pentathlon
quin-	five	quintet, quintuplet, quintuplicate
hexa-	six	hexagon, hexameter
sext-	six	sexagenarian, sextet, sextuplet
hepta-	seven	heptagon, heptameter
septem-/septi-	seven	septuagenarian
octo-/oct-	eight	octogenarian, octopus
octa-	eight	octagon, octahedron, octant
novem-	nine	novena
deca-/decem-	ten	decade, decagon, decahedron, decalogue
deci-/deca-	ten	decade, decibel, decimal, decimate
cent-/cente-	hundred	cent, centenary, centennial, centipede, centurion
kilo-	thousand	kilobyte, kilogram, kilometer
milli-/mille-	thousand	millennium, milligram, millisecond
micro-/micr-	small	microbiology, microcosm, microscope, microscopic, micro-surgical, microwave
equi-	equal	equidistant
multi-	many	multifaceted, multifunction, multi-lateral, multilingual, multimedia, multiple, multiply, multi-purpose, multitude, multivitamin
poly-	many, much	poly angular, polychromatic, polyclinic, polyester, polygamy, polyglot, polygon, polymer, polynomial, polysyllabic

<b>Table 2-14 Prefixes that indicate number or amount (continued)</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
semi-	half, partially	semester, semi-annual, semiannual, semicircle, semicolon, semi-conscious, semi-desert, semifinal, semiformal, semisweet

## 2. Prefixes that indicate measurement

<b>Table 2-15 Prefixes that indicate measurement</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
a-/an-	lacking	amoral, asymmetric, atonal
ambi-	both, around	ambidextrous, ambiguous, amphibious, amphitheater
arch-	chief, principal, high	archbishop, archduke
crypto-	secret, hidden	cryptanalytic, cryptograph
hemi-	half, partially	hemisphere, hemistich
holo-	whole, entire	holocaust, hologram
is-/iso-	equal	isochronism, isosceles, isotope
mero-	part, partial	meroblastic
macro-	large, broad scale	macro-biotic, macroeconomics, microclimatology
micro-	tiny, small scale	microorganism, microscope
mid-	middle	midlands, midnight, midwinter
mini-	small, reduced in size	miniature, minibike, minibus, minimal, miniseries
multi-	many, much	multifaceted, multiform, multifunction, multigrain, multilingual, multinational, multiple, multiply, multitude, multivalent
oligo-	few	oligarchy, oligotrophic
over-	to excess, too much	overact, overage, overboard, overdo, overdose, overdue, overestimate, overlap, overload, overlook, oversee, oversleep, overtax, overtime
omni-	all	omnidirectional, omnipotent, omnipresent, omniscient
pan-	all, comprising, affecting all	pandemic, panorama

**Table 2-15 Prefixes that indicate measurement (continued)**

Prefix	Meaning	Examples
under-	not sufficiently, too little	underage, undercook, underdone, underestimate, underfed, undergraduate, undernourished, underpay, underpay
ultra-	beyond, extreme	ultra modest, ultraliberal, ultraviolet

**3. Prefixes that indicate location or spatial relationships:** certain prefixes give clues about where something is located, where something occurs, or say something about place, direction, time or duration of time.

**Table 2-16 Prefixes that indicate location or spatial relationships**

Prefix	Meaning	Examples
ab-/a-/abs-	from, away	abjure, abnormal, abstinence
ad-/a-	toward	admit, admonish, advance, ascribe, avenge, avenue
ana-	up, back	anachronism, analogy, anaphora, anatomy
ante-	preceding, before	antebellum, antecedent, antechamber, antedate, ante-Norman, anterior
apo-	away, from	apocryphal, apology, apostasy
cata-	down, away, back, opposite	catapult, catastrophe
circum-	around	circumcise, circumference, circumlunar, circumnavigate, circumscribe, circumspect, circumstance
counter-	against, opposite	counterbalance, counterexample, counterfeit
de-/di-/dis-	from, away, down	debase, debug, decaf, defog, defrost, depend, deplane, derail, digest, direct, dismiss
dia-	across, through	diachronic, diagnostic, diagonal, diameter, diameter
dis	apart from, not	disable, disarm, disbar, disgraceful, dishonest, dislike, disown, disuse
ecto-/exo-	external	ectoderm, ectoplasm, entophyte, exocentric, exordial
en-/em-	in, into	embark, embattle, embody, enable, enact, encapsulate, enclose

**Table 2-16 Prefixes that indicate location or spatial relationships (continued)**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
endo-	internal	endocardia, endocentric, endocrinology, endodontic, endogenous
epi-	on, over	epic central, epicycle, epidermis, epiglottis
ex-/ec-/e-	out from, away	eccentric, educate, emit, eradicate, excavate, exception, exclusive, excusal, exhale, exit, expel, expire
ex-	former	ex-employee, ex-president, ex-wife
fore-	before, in front of	forefather, foreground, forehead, foresee, foretell
fore-	in time or space	forecast, forefinger, foresee, foreseeable, foreshadow, foresight, forethought
hyper-	over, excessive, too much	hyperactive, hypercritical, hypermarket, hypersensitive
infra-	below, beneath, within	infra-territorial, infrared, infrastructure
in-/im-	in, into, within	immigrant, import, inaugurate, inborn, include, income, inflow, ingredient, inhale, input, insert
inter-	between ,among	interact, interbreed, interchange, interface, interject, interlace, interlock, intermingle, intermission, intermix, international, internet, interplay, interpose, interrupt, intersect, interstate, intervention
intra-/intro-	inside, within, in	intracellular, intramural, intramuscular, intravenous, introduction, introvert, introverted
mid	middle	midair, midday, midnight, midstream, midterm, midway, midweek, Midwest
neo-	new, recent	neoclassical, Neo-Latin, Neolithic, neonatal, neotype
ob-	toward, against	obdurate, obfuscate, obsequious
para-	beside, along with	paralegal, parallel, paramedic, paranormal, paraprofessional
per-	through, thoroughly	pernicious, perspire, pervade

**Table 2-16** Prefixes that indicate location or spatial relationships (continued)

Prefix	Meaning	Examples
peri-	around, nearby	perimeter, peristaltic
pre-	before, in front of	precede, preconcert, precook, precut, predate, predetermine, predict, pregame, preheat, premature, premedical, premix, prepaid, prepare, prepay, preplan, preposition, preschool, preseason, presoak, pretest, prevent, preview, prewar, prewashed
post-	after, later, behind	post modify, post structuralism, postdate, postmodern, postnasal, postpone, postposition, postseason, posttest, postwar
pro-	concerning, towards	proselyte, prosody
pro-	forward, forth, in front of	proceed, professor, progress, project, proposition, proscenium, protrude
re-/red-	back, again	react, rearm, reboot, rebuild, recede, reconsider, recycle, redaction, redeem, redo, refills, refund, regenerate, rehearse, remarry, renew, repay, repeat, replay, reread, rerun, restore, retrain, retreat, return, reuse, review, reward, rewrite
retro-	back, backwards	retroactive, retroflex, retrogression, retrospection
semi-	half, partly	semicircle, semicolon, semifinal, semiprecious, semisoft, semisweet
sub-	under, below	subcommittee, subcontract, subdivision, subdue, submarine,
sub-	under, below	subplot, subset, substandard, substandard, substitute, subtext, subtitle, subtraction, subversive, subway, subzero
super-	above, in addition	superfine, superhero, superhighway, superior, superman, supermarket, supermodel, supernatural, supersonic, superstar, superstore, supervise
sur-	over, above, beyond	surrealistic, surtax
syn-	with, together	synchronous, synthetic

<b>Table 2-16 Prefixes that indicate location or spatial relationships (continued)</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
tele-	far, distant	telemarketing, telephone, telephoto, telescope, television
trans-/tres-/tra-	across, through, move between, across, surpassing	trans human, tradition, transact, transalpine, transcend, transcontinental, transfer, transform, transfusion, transgender, translate, transoceanic, transparent, transplant, transpolar, transport, transport

**4. Prefixes that indicate negation:** negative prefixes are among the most commonly used prefixes. When they are attached to words, they create a word that means the opposite of the base word.

<b>Table 2-17 Prefixes that indicate negation</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
a (n)	without	asexual, asymptomatic
a (n)	not	ahistorical, asymmetrical
anti-	against, opposed	antacid, antibiotic, anticrime, antidepressant, antidote, antifreeze, antiglare, antiknock, anti-particle, anti-Semitic, antisocial, antitheft, antitrust, antiwar, antonym
anti-	not having the proper characteristics of	anti-hero, anti-professor
contra-	opposed to, against	contraception, contradict, contradiction, contrary
contro-	opposed to, against	controversy
counter-	opposed to, against	counterattack, counterclockwise
de-	reverse	decaffeinated, defoliate, dehydrate, deselect
dis-	reverse	discharge, disconnect, discover, disproof
dis-	not, negative, lacking	disagree, dishonest, dislike, disobey, dispassionate
dis-	intensifier	disable, disable, disallow, disannul, discomfort, discomfort, discontent, disgruntle, displease, dissimilar, distaste, distrust, disturb

**Table 2-17 Prefixes that indicate negation (continued)**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
in-	not	inactive, inactive, incapable, incomplete, incorrect, incredible, indefinite, indifferent, indirect, indiscreet, inedible, ineffectual, inhuman, injustice, invisible, invisible
im-	not	imbalance, immoral, immortal, impartial, imperfect, implant, impossible, improbable
il-	not	illegal, illegible, illiterate, illogical
ir-	not	irregular, irresistible, irresponsible
non-	not	non-biological, nonfiction, non-returnable, nonsense, nonspecific, nonstop, nonverbal
non-	absence, not having the character	nonalcoholic, non-delivery, non-drinker, nonfat, non-issue, non-member, non-profit, non-resident, nonstick, non-user
ob-	inverse, in the opposite direction	object, obverse
se-/sed-	apart	select, separate
se-/sed-	chosen apart	sedition, seduce
un-	not	sunbreak, unavailable, unaware, unbearable, unbroken, unclean, unclear, uncontested, uncouth, uncover, uncut, uneven, unhappy, unlock, unmindful, unpopular, unsafe, unsuccessful, unsure
un-	lack of, absence of opposite, reverse	unbelief, unbutton, uncoil, uncork, undo, undress, uneducated, unfold, unload, unlock, unmark, unplug, unrepaired, untie, untruth, unwrap, unzip
un-	not having, the proper characteristics of	un-American, uncelebrated, un-Hollywood

**5. Prefixes that indicate judgment:** some prefixes make a judgment about the root.

**Table 2-18 Prefixes that indicate judgment**

Prefix	Meaning	Examples
bene-/eu-	good, well	benefit, benign, beneficial, benediction, benevolent, eulogy, euphemism, euphoria
dys-	bad, badly	dyslexic, dyspeptic
eu-	good, well	eugenics, euphoria
extra-	outside the scope of	extramarital, extraordinary
mal-	bad, evil, wrong	maladjusted, malfeasance, malfunction, malicious, malnutrition, malodorant, malpractice
mis-	wrong (ly), bad	miscalculate, miscount, misdeed, misfit, misfortune, misguided, misinterpret, misjudge, mislay
mis-	wrong (ly), bad	mislead, mismatch, misplace, misplace, mispronounce, misread, misreport, misspent, mistrial, misunderstand, misuse
meta-	transcending, changed	metamorphosis, metaphysics
pro-	on behalf of	non-British, pro-education
proto-	first, chief	protoorganism, protoplasm, prototype

**6. Prefixes that indicate involvement:** prefixes can say something about the kind of involvement of the participants in the action of the root.

**Table 2-19 Prefixes that indicate involvement**

Prefix	Meaning	Examples
pseudo-	false, deceptive resemblance	pseudo-archaic, pseudonym, pseudo-prophet, pseudoscientific
auto-	self	autobiography, auto-immune, auto-immune, automatic, automatically, automaton, automobile
co-	together, jointly	coauthor, coexistence, concur, cooperate, cooperative, coordinator, copilot, coworker
col-	together, with	collaborate, colleague, collide

**Table 2-19 Prefixes that indicate involvement (continued)**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
com-/con-	together, with	combine, commit, committee, communicate, concert, concur, connect
syn-/sys-	together, with	sympathy, symphony, synchronize, syncope, syncretic
vice-	in place of, instead	vice-consul, vice-president

## 7. Prefixes that indicate fields of study

**Table 2-20 Prefixes that indicate fields of study**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
audio-	hear	audiometer, audiophile, auditory
aqua-	water	aquarium, aquatic
anthropo-	human being	anthropocentric, anthropology, anthropomorphic
archaeo-	ancient	archaeology, archaeopteryx, archaic archaic
bio-	life	bio astronaut, biographer, biology, biotechnology
geo-	earth	geographer, geography, geology, geothermal,
gyneco-	woman	gynecocracy, gynecology, gynecopathy
legis (lex)	law	legal, legislature
philo-	love	philanthropy, philosophy
pysch-	mind	psychology, psychopath, psychosis, psychosurgeon
publicus-	people	pub, public, publican, republic
theo-	god or gods	theologian, theology, theomorphic, theomorphism

## 8. Other important prefixes

**Table 2-21 Other Important Prefixes**

<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
be-	to, completely	befriend, bejeweled, belittle, beloved
en-/em-	cause to	endure, enjoy, enlighten, entail
homo-	same, alike	homogenize, homonym, homophone

<b>Table 2-21 Other Important Prefixes (continued)</b>		
<b>Prefix</b>	<b>Meaning</b>	<b>Examples</b>
pro-	for, in favor of	pro-American, pro-choice, pro-life, pro-war
self-	of, to or by yourself	self-control, self-study, self-taught
therm-	heat, warm	thermal, thermometer, thermostat

## Guidelines in Adding Prefixes

Guidelines for adding prefixes are suggested by Rozakis (2003); Umera-Okeke, (2007) as follows:

### 1. Prefixes “in-”

Prefix “in-” should be added to the adjective base to form the meaning “not or opposite of” and has many forms depending on the initial segment base which is covered by phonological conditions:

“in-” is used before alveolar and velar sounds /d, k, s/ and the labio-dental fricative /v/:

appropriate	inappropriate
coherent	incoherent
competent	incompetent
convenience	inconvenience
consistent	inconsistent
conspicuous	inconspicuous
credible	incredible
credulous	incredulous
curable	incurable
decision	indecision
definite	indefinite
defensible	indefensible
dependent	independent
describable	indescribable
decent	indecent
direct	indirect
sincere	insincere
visible	invisible

“im-” is placed before bilabial sounds /b, p, m/ as in:

balance	imbalance
patient	impatient
perfect	imperfect

possible	impossible
potent	impotent
practical	impractical
probable	improbable
pure	impure
mature	immature
mobile	immobile
modest	immodest
mortal	immortal
movable	immovable

“*ir-*” is used before “*r*”

regular	irregular
relevant	irrelevant
reparable	irreparable
replaceable	irreplaceable
resistible	irresistible
resolute	irresolute
responsible	irresponsible

“*il-*” is used before “*l*”

legal	illegal
legitimate	illegitimate
liberal	illiberal
literate	illiterate
logical	illogical

## 2. Prefix “*un-*”

“*un-*” attaches to all adjectives and can only attach to words, not to bound morphemes:

fair	unfair
fortunate	unfortunate
happy	unhappy
interesting	uninteresting
just	unjust
necessary	unnecessary
tidy	untidy

3. Adding a prefix does not change the spelling of the base word. Simply add the prefix to the beginning of the base words, as in unhappy, dissatisfied, and interrelated.

**4. The spelling of the prefix does not change.** A prefix will be spelled the same no matter what base word it is attached to as a prefix, such as “*poly-*”, in polygon, polygraph, polyester, polygram.

**5. Double letters can occur as follow:**

dissatisfy, disservice, dissimilar, dissolve irreconcilable  
 illogical, illegal, illiteracy  
 immature, immaterial, immeasurable, immobile, immoral  
 irredeemable, irregular, irrelevant, irreparable, irresistible, irresponsible,  
 misspoke, misspell, misstep  
 unnecessary, unnoticeable

**6. Some words contain the same string of letters as prefixes but they are not prefixes, as the prefix “*re-*” in *real* is not a prefix.** Other examples are uncle, pretty, press, interest, reach, irony, dish, antique.

### Rules for Using Hyphens with Prefixes

A prefix is usually added directly to the base word, but sometimes a hyphen is needed. The following are six common rules for adding a hyphen between the prefix and the base word: (Straus, 2008)

**Rule 1** The current trend is to do away with unnecessary hyphens; therefore, attach most prefixes onto root words without a hyphen.

**Examples:** noncompliance, copayment, semiconscious

**Rule 2** When a prefix ends in one vowel and a root word begins with a different vowel, generally attach them without a hyphen.

**Examples:** antiaircraft proactive

**Rule 3** Hyphenate prefixes when they come before proper nouns or numerals.

**Examples:** un-American, pre-1980

**Rule 4** Use a hyphen with the prefix *ex-*, meaning former, but do not use with “*ex-*” meaning out of or away from. Use a hyphen only when the original word is capitalized or with the prefix “*ex-*” meaning previous or former.

anti + social = antisocial                      un + stable = unstable

non + Celtic = non-Celtic                      ex- + director = ex-director

**Examples:** ex-wife, ex-president

**Rule 5** Use the hyphen with the prefix “*re-*” only when “*re-*” means again to prevent misreading or confusion with another word.

**Examples:** recover vs. re-cover (again) as in

*Re-cover the boat when you recover from the flu.*

relay vs. re-lay (again) as in

Please *relay* the message that they will *re-lay* the tiles.

**Rule 6** Hyphenate after the prefix “*self*” except for selfish and selfless.

**Examples:** self-assured, self-respect, self-addressed, self-respect, self-assured, self-control

**Rule 7** Hyphenate to separate double letters “*a*” and “*i*” which might cause misreading or mispronunciation.

**Examples:** ultra-ambitious, semi-invalid, anti-intellectual

**Rule 8** A hyphen may be used to separate double letters “*e*” and “*o*” to improve readability or prevent mispronunciation.

**Examples:** co-owner, co-opt, co-ordinate (coordinate in usual spelling)

de-emphasize, re-enter (reenter in usual spelling)

## Summary

In this chapter, prefixes and classification of prefixes have been discussed. Understanding the use of prefixes is an important part of building better readers and writers. Regardless of whether a student is a beginner or advanced level, one should learn prefixes and use that knowledge in becoming more proficient in English language. Understanding the use of prefixes on root words is an essential building block in learning the language. Derivational prefixes include class-changing and class-maintaining. Semantic classes of prefixes in English comprise number or amount, measurement, location, negation, judgment, involvement, fields of study and other important prefixes. As discussed in this chapter, a prefix placed in front of the root word will most often change the meaning of the word being used in a sentence. Guidelines for adding prefixes and hyphen rules are also provided in this chapter.

## Exercises

### Exercise 2-1: Prefixes

**Directions:** Write the prefix and meaning for each prefix.

1. befriend      Prefix: \_\_\_\_\_ Meaning: \_\_\_\_\_
2. decentralize      Prefix: \_\_\_\_\_ Meaning: \_\_\_\_\_
3. disconnect      Prefix: \_\_\_\_\_ Meaning: \_\_\_\_\_
4. antisocial      Prefix: \_\_\_\_\_ Meaning: \_\_\_\_\_
5. Coordinate      Prefix: \_\_\_\_\_ Meaning: \_\_\_\_\_

### Exercise 2-2: Prefixes

**Directions:** Use one of the words from the list to complete each sentence.

*antisocial / befriend / coordinate / decentralize / disconnect*

1. You should \_\_\_\_\_ or unplug a broken machine from the electricity supply.
2. To \_\_\_\_\_ means to make the different things work effectively as a whole.
3. David is \_\_\_\_\_ and often avoids spending time with other people.
4. The government will \_\_\_\_\_ the operation by moving the control of an organization or government from a central place to several different smaller ones.
5. To \_\_\_\_\_ is to behave in a friendly way towards someone.

### Exercise 2-3: Prefixes

**Directions:** Underline the prefix of each **bold** word in each sentence and write the meaning of the word in the space provided.

1. I thought most of the characters in this series were **unbelievable**.  
\_\_\_\_\_
2. Diary of a Minecraft Zombie is a popular children's **nonfiction** book.  
\_\_\_\_\_
3. You must have **misunderstood**; I told you I would be here in the afternoon, not in the morning.  
\_\_\_\_\_
4. A **hyperactive** child has too much energy.  
\_\_\_\_\_
5. My brother is a very good mechanic, and he is **self-taught**.  
\_\_\_\_\_

**Exercise 2-4: Prefixes****Directions:** Use a word from the list to complete the meanings of each sentence.*hyperactive / misunderstand / nonfiction / self-taught / unbelievable*

1. Some romance movies are simply \_\_\_\_\_!
2. You will find biographies in the \_\_\_\_\_ section of the bookshop.
3. My son is \_\_\_\_\_, he has problems paying attention and sitting still in his seat.
4. My students always \_\_\_\_\_ my questions in class.
5. The \_\_\_\_\_ guitar lessons are a new, easy and fun way to learn to play.

**Exercise 2-5: Prefixes that indicate number or amount and measurement****Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.**Column A**

1. \_\_\_\_ multinational
2. \_\_\_\_ underestimate
3. \_\_\_\_ oversleep
4. \_\_\_\_ monotone
5. \_\_\_\_ polyglot

**Column B**

- a. speaking or using several different languages
- b. a sound that stays on the same note without going higher or lower
- c. involving several different countries, or (of a business) producing and selling goods in several different countries
- d. to sleep for longer than you intended to and so wake up late
- e. to fail to guess or understand the real cost, size, difficulty, etc. of something

**Exercise 2-6: Prefixes that indicate number or amount and measurement****Directions:** Use a word from the list to complete the meanings of each sentence.*monotone / multinational / overslept / polyglot / underestimate*

1. He spoke in a boring \_\_\_\_\_.
2. She was reading a \_\_\_\_\_ bible, with the text in English, Latin and Greek.
3. Ford is a \_\_\_\_\_ motor company.
4. He missed the lecture as he \_\_\_\_\_.
5. Students often \_\_\_\_\_ the importance of reading.

### **Exercise 2-7: Prefixes that indicate location or spatial relationships and involvement**

**Directions:** Use the words from the list with their corresponding definitions.

*communicate / coordinator / exclusive / forecast / subtitles*

1. A \_\_\_\_\_ is a statement of what is judged likely to happen in the future.
2. Words shown at the bottom of a film or television picture to explain what is being said are called \_\_\_\_\_.
3. \_\_\_\_\_ means it will be limited to only one person or group of people.
4. \_\_\_\_\_ means someone whose job is to make different groups work together in an organized way to achieve something.
5. \_\_\_\_\_ can be defined as sharing information with others by speaking, writing, moving your body, or using other signals.

### **Exercise 2-8: Prefixes that indicate location or spatial relationships**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*communicate / coordinator / exclusive / forecast / subtitles*

1. It is difficult to join such an \_\_\_\_\_ club.
2. We can now \_\_\_\_\_ instantly with people on the other side of the world.
3. We've just appointed a \_\_\_\_\_ who will oversee the whole project.
4. The weather \_\_\_\_\_ said it was going to rain later today.
5. American films often have \_\_\_\_\_ in the Thailand.

### **Exercise 2-9: Prefixes that indicate negation and judgment**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

#### **Column A**

1. \_\_\_ decaffeinated
2. \_\_\_ misfortune
3. \_\_\_ malnutrition
4. \_\_\_ illegible
5. \_\_\_ unpredictable

#### **Column B**

- a. impossible or almost impossible to read because of being very untidy or not clear
- b. likely to change suddenly and without reason and therefore not able to be predicted or depended on
- c. coffee or tea from has had the caffeine removed
- d. physical weakness and bad health caused by having too little food, or too little of the types of food necessary for good health
- e. bad luck, or an unlucky event

**Exercise 2-10: Prefixes that indicate negation and judgment****Directions:** Use a word from the list to complete the meanings of each sentence.*decaffeinated / illegible / malnutrition / misfortunes / unpredictable*

1. Because my daughter's handwriting is nearly \_\_\_\_\_, she got a D on her report card for handwriting.
2. The child's behavior was \_\_\_\_\_.
3. Many people are switching to \_\_\_\_\_ coffee.
4. Many of the refugees are suffering from severe \_\_\_\_\_.
5. It is unfair to take advantage of other people's \_\_\_\_\_.

**Exercise 2-11: Prefixes that indicate fields of study and other important prefixes****Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.**Column A**

1. \_\_\_\_ legal
2. \_\_\_\_ beloved
3. \_\_\_\_ self-control
4. \_\_\_\_ aquarium
5. \_\_\_\_ psychology

**Column B**

- a. the scientific study of the way the human mind works and how it influences behavior, or the influence of a particular person's character on their behavior
- b. a glass container in which fish and other water creatures can be kept
- c. connected with the law
- d. loved very much
- e. control over your emotions and actions; self-restraint

**Exercise 2-12: Prefixes that indicate fields of study and other important prefixes****Directions:** Use a word from the list to complete the meanings of each sentence.*aquariums / beloved / legal / psychology / self-control*

1. She studied \_\_\_\_\_ at Harvard University.
2. It is Guppy of all size, shape, and color that were mostly found in the fresh water \_\_\_\_\_ at the show.
3. I need some \_\_\_\_\_ advice from my lawyer.
4. At the time, Rosen says he could not possibly have thought that anything was worse than losing his \_\_\_\_\_ son.
5. A coach tries to teach teamwork and \_\_\_\_\_ to his team.

**Exercise 2-13: Reading and vocabulary**

**Directions:** Read the following paragraph and use your knowledge of prefixes to identify the meaning of each of the word in boldfaced type. Use a dictionary if necessary.

Letter from a **nonprofit** organization: Every year, more than 10 million children in developing countries die before reaching their fifth birthday. Of these deaths seven million are caused by one or more of five common conditions: pneumonia, diarrhea, malaria, measles, and **malnutrition**. These conditions can be **prevented** in simple and **inexpensive** ways: with vaccinations, bed nets, food, clean drinking water, and basic medicine. So why do so many children still die every day? The aim of our organization is to reduce these numbers, to save as many children as possible from **unnecessary** suffering and death. (Jeffries & Mikulecky, 2012, p. 138)

1. nonprofit: \_\_\_\_\_
2. malnutrition: \_\_\_\_\_
3. prevented: \_\_\_\_\_
4. inexpensive: \_\_\_\_\_
5. unnecessary: \_\_\_\_\_

**Exercise 2-14: Create the sentences**

**Directions:** Write sentences using the words provided.

1. nonprofit: \_\_\_\_\_
2. malnutrition: \_\_\_\_\_
3. prevented: \_\_\_\_\_
4. inexpensive: \_\_\_\_\_
5. unnecessary: \_\_\_\_\_

## Chapter 3

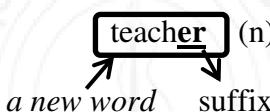
### Suffixes

#### Introduction

Suffixes are word parts which are added at the end of the root or base word, and are important in determining the meaning of words in English. Suffixes are useful to indicate word-class or part of speech of a word and to help in discovering the base word after removing the suffix. By learning the variations in meaning that occur when suffixes are added to words students can expand their vocabulary. This chapter will focus on the most common suffixes used in English and techniques on how they are used effectively.

#### Suffixes

A suffix is a bound morpheme or a group of letters that is added to the end of a root or base word, and is used to change its meaning, for example:

Root + suffix	Word	Meaning
teach + er		one who teaches

Although its new meaning is often similar to the original meaning (PREL, 2008), some suffixes have a specific meaning, some will change a word's part of speech, some will change a base word's meaning, and some will change a verb's tense of words they are attached to. There are two types of suffixes which comprise derivational and inflectional. (Fry & Kress, 2006)

#### 1. Inflectional suffixes

Inflectional suffixes indicate certain grammatical forms of words such as tense, number, and degree when added to their base. Inflectional suffixes change the form of a word without changing its category or its meaning as in *dogs*, the suffix “-s” is added to the noun *dog* to indicate a plural meaning.

1.1 Further to DeCapua (2008), Delahunty & Garvey (2010), Fromkin, Rodman & Hyams (2003), and Meyer (2009), there are only eight regular inflectional suffixes in English as shown in Table 3.1:

**Table 3-1 The eight English inflectional suffixes**

Suffix	Grammatical Function	Base	Examples
-ed	regular past tense	verb	helped, walked, talked

<b>Table 3-1 The eight English inflectional suffixes (continued)</b>			
<b>Suffix</b>	<b>Grammatical Function</b>	<b>Base</b>	<b>Examples</b>
-ed	regular past participle (follows <i>be</i> or <i>have</i> )	verb	has talked, has walked
-er	comparative (usually accompanied by <i>than</i> )	adjective/adverb	longer, stronger, wider
-est	superlative ( <i>sometimes accompanied by of</i> )	adjective/adverb	longest, strongest, widest
-s	third person singular	verb present tense	pushes, writes
-s	plural	noun	books, dogs, teachers
-'s	possessive	noun	father's car, students' book
-ing	present participle (follows <i>verb to be</i> )	verb	going, jumping, listening, walking

1.2 However, Fry & Kress (2006) classify the inflectional suffixes into noun suffix, adjective suffixes, verb suffixes and adverb suffixes. Some examples are shown in Table 3-2 – 3-5:

### 1.2.1 Noun suffixes

<b>Table 3-2 Noun suffix</b>		
<b>Suffix</b>	<b>Grammatical Function</b>	<b>Example</b>
-s	indicates that a noun is plural	books, boxes, boys, cats, desks, dogs, hands, pencils, shoes, students, teachers

### 1.2.2 Adjective suffix

<b>Table 3-3 Adjective suffixes</b>		
<b>Suffix</b>	<b>Grammatical Function</b>	<b>Example</b>
-en	change N or V to Adj.	chosen, stolen, written
-er	comparative adjectives	bigger, crazier, faster, shorter
-ese	change N or V to Adj.	Chinese, Japanese, Siamese
-est	superlative adjectives	biggest, craziest, fastest, fattest, shortest
-ful	change N or V to Adj.	careful, fearful, thoughtful
-ic	change N or V to Adj.	historic, metallic, scenic
-ish	change N or V to Adj.	childish, Scottish, tickle

### 1.2.3 Verb suffixes

<b>Table 3-4 Verb suffixes</b>		
<b>Suffix</b>	<b>Grammatical Function</b>	<b>Example</b>
-like	change N or V to Adj.	boxlike, childlike, lifelike
-ward	change N or V to Adj.	eastward, southward, westward
-y	change N or V to Adj.	bossy, milky, tricky
-ed	indicates past tense	cooked, cried, dressed, jumped, sailed, studied, tired, typed, walked
-en	indicates past participle	eaten, forgotten, frozen, hidden, spoken, stolen, written
-ing	indicates present participle	dressing, eating, going, jumping, listening, racing, singing, studying
-s	indicates third-person singular	cooks, dresses, plays, runs, studies, teaches, walks

### 1.2.4 Adverb suffixes

<b>Table 3-5 Adverb suffixes</b>		
<b>Suffix</b>	<b>Grammatical Function</b>	<b>Example</b>
-ly/-ily	indicates an adverb	beautifully, clearly, clumsily, greedily, hungrily, loudly, lovely, neatly, plainly, quickly, skillfully, slowly, softly

## 2. Derivational suffixes

Derivational suffixes are added to base words to create a new word that is derived from the base word but has a different meaning, as adding “-less” to *color* creates *colorless* (without color), a word related to *color* but different in meaning. Derivational suffixes also change grammatical classes of words such as changing words to become nouns, verbs, adjectives and adverbs; for example the noun *child* can be extended to *childhood* (state of being a child) or added the suffix “-ish” to form an adjective in the word *childish* (of or relating to a child).

The derivational suffix and its consequential creation of a new lexeme (or word link) can be divided into two main categories: class-maintaining and class-changing. (Adams, 1973; Bauer, 1983)

2.1 Class-maintaining suffixes create a new word formed by derivational suffixes but do not change the class of root or base word, as in *leadership* (*noun*), “-*ship*” is added to the noun base and does not change the form of *leader*. (Bauer, 1983; Fromkin, Rodman & Hyams, 2003; Umera-Okeke, 2007) Some examples of class-maintaining suffix are as follows:

**Table 3-6 Class-maintaining suffixes**

Base	Suffix	Example
adjective	-ish	foolish, greenish, reddish, snobbish
noun	-ad(e)	accolade, armada, ballad, brigade, cannonade, comrade, lemonade, parade, salad, sonata
	-age	acreage, assemblage, brokerage, frontage, usage
	-ate	emirate, opiate, triumvirate
	-cy	chaplaincy, lunacy, magistracy, presidency, tenancy, truancy
	-dom	dukedom, earldom, kingdom, officialdom
	-ess	actress, stewardess
	-ful	cupful, handful, houseful, mouthful, spoonful
	-hood	adulthood, boyhood, childhood, falsehood, girlhood, manhood, priesthood, priesthood, womanhood
	-ish	foolish, greenish, reddish, selfish
	-ism	cannibalism, criticism, journalism, pauperism
	-ry	burglary, citizenry, knavery, machinery, weaponry
	-ship	citizenship, dictatorship, friendship, hardship, headship, horsemanship, judgeship, leadership, ownership, penmanship, relationship, scholarship, showmanship, trusteeship, trusteeship, workmanship, workmanship
	-ster	prankster, punster, rhymester, songster, trickster, youngster
	-ure	candidature, forfeiture, imposture, nomenclature, portraiture

2.2 Class-changing suffixes change the word class of the word to which they are added as in *believable* (*adjective*), when “-able” is added to the verb base “believe” and becomes an adjective form. Suffixes signal the grammatical classes of the words in which they appear, and are classified into noun suffixes, verb suffixes, adjective suffixes, and adverb suffixes. (Bauer, 1983; Fromkin, Rodman & Hyams, 2003; Meyer, 2009; Minkova & Stockwell, 2009; Plag, 2002; Umera-Okeke, 2007)

### 2.2.1 Noun suffixes

#### (1) Conversion of verbs to nouns

**Table 3-7 Conversion of verbs to nouns**

Suffix	Meaning	Examples
-acy/-asy	State or quality	accuracy, advocacy, conspiracy, ecstasy, intricacy
-age	condition, state, result of an action	anchorage, cleavage, coinage, marriage, pilgrimage, postage, usage, voyage, wastage
-al	action, the result of action	acquittal, arousal, arrival, avowal, betrayal, rebuttal, recital, referral, rehearsal, renewal, revival, trial, withdrawal
-ance	act of , state or quality of	abeyance, annoyance, attendance, attendance, clearance, continuance, deliverance, dominance, grievance, ignorance, maintenance, performance, perseverance, reactance, reassurance, remonstrance, repentance, resistance, tolerance
-ant	substances, involved in process	attractant, celebrant, coagulant, confidant, defendant, dispersant, etchant, lubricant, suppressant
-dom	State or quality of	boredom, freedom, martyrdom, wisdom
-ence	act of, state or quality of	abhorrence, absence, abstinence, adherence, coincidence, condolence, confidence, emergence, inference, obedience, offence, precedence, prominence, reticence, subservience, violence
-ion/-tion/ -ation	state of being, act of being	absorption, accumulation, action, adaptation, adoption, afforestation, ambition, attention, authorization, caution, champion, civilization, collection, companion, computation, contemplation, contention, accumulation, action, adaptation, adoption, afforestation, ambition

<b>Table 3-7 Conversion of verbs to nouns (continued)</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
		attention, authorization, caution, champion, civilization, collection, companion, computation, contemplation, contention, convocation, coronation, corruption, declamation, decoration, demonstration, deprivation, derivation, desperation, destruction, divination, emancipation, enumeration, evocation, evolution, exclamation, explanation, fascination, fixation, flirtation, illustration, improvisation, information, inhalation, inspiration, intention, intercession, invocation, meditation, narration, nation, obstruction, onion, organization, polarization, pollination, proclamation, provocation, purification, recognition, repression, resolution, revocation, stagnation, starvation, suspicion, tension, transition, vacation
-ition	act of	abolition, admonition, demolition, exhibition, fruition, inhibition, partition, prohibition
-ity	state, quality or condition of being	activity, actuality, agility, civility, diversity, felicity, necessity, parity
-ment	action, process, condition of being	abandonment, abridgement, acknowledgement, advancement, amendment, amusement, argument, defilement, detachment, development, embellishment, embezzlement, government, incitement, merriment, resentment, treatment
-ment	product of thing	aggrandizement, amazement, predicament
-ry/-ery	quality of trade, occupation, establishment	archery, bakery, bravery, brewery, butchery, dentistry, fishery, forgery, grocery, laundry, nunnery, savagery, sorcery, surgery, watery

**Table 3-7 Conversion of verbs to nouns (continued)**

Suffix	Meaning	Examples
-ry/-ery	goods or products	cutlery, jewelry, pottery
-sion	act of	aversion, collision, conclusion, conversion, decision, diversion, division, evasion, excision, extrusion, invasion, inversion, persuasion, pretension, provision, reversion, revision, scansion, supervision, tension
-sis	act, state or condition of	analysis, synthesis
-ssion	act of	accession, concession, emission, intercession, omission, procession, remission, secession, supersession, transmission
-ure	action or process	censure, enclosure, endure, erasure, exposure, failure, forfeiture, inure, investiture, legislature, posture, procedure, procure, secure, seizure
-ution	act of	absolution, devolution, evolution, resolution, revolution

(2) Conversion of verbs to nouns (action suffixes): these suffixes describe the actions or occupations of people or the uses of things.

**Table 3-8 Conversion of verbs to nouns**

Suffix	Meaning	Examples
-ant/-ent	one who	agent, applicant, aspirant, celebrant, defendant, entrant, informant, inhabitant, migrant, occupant, participant, pollutant, servant
-ar	one who	bagger, liar
-ard	one who	coward, drunkard, steward, wizard
-arian	member of a sect, holding to a doctrine	authoritarian, egalitarian, humanitarian, libertarian, librarian, septuagenarian, utilitarian
-ast	one associated with	enthusiast, pederast
-cart	person of power	autocrat, democrat
-ee	object of action	addressee, advisee, employee, employee, payee, trainee, vendee

<b>Table 3-8 Conversion of verbs to nouns (continued)</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-enne	female	comedienne, equestrienne, tragedienne
-ent	one who	adherent, antecedent, correspondent, deterrent, precedent, president, recipient, regent, resident, student, superintendent
-eer	one who	auctioneer, auctioneer, engineer, mountaineer, puppeteer, volunteer
-er	one who	adviser, baker, betrayer, carrier, defender, gardener, informer, magnifier, painter, programmer, retriever, runner, seller, sender, shipper, speller, sweeper, teacher, thriller, trainer, worker, writer
-er	one who	adviser, painter, programmer, retriever, seller, shipper, teacher, trainer, worker, writer
-ese	person belonging to	Chinese, Portuguese
-ess	one who (female)	actress, countess, hostess, laundress, stewardess, tigress, waitress
-eur	one who	chauffeur, connoisseur, masseur
-ier/-yer	one who	cahier, financier, gondolier, lawyer
-ian	one skilled in some art or science	comedian, magician, mathematician musician, physician
-ina	female	ballerina, czarina
-ist/-yst	one who practices	anesthetist, apologist, catalyst, dentist, dogmatist, dramatist, pianist, plagiarist, pugilist, ventriloquist
-ist/-yst	one who believes in	fascist, pacifist, perfectionist, socialist
-ite	person	luddite, socialite
-man	one who works with	cameraman, doorman, mailman
-or	one who	actor, auditor, conveyor, debtor, decorator, doctor, donor, mediator, mentor, sailor, vendor
-ster	person	gamester, gangster
-trix	female	aviatrix, executrix
-wright	one who works with	playwright, shipwright, wheelwright

## (3) Conversion of adjectives to nouns

<b>Table 3-9 Conversion of adjectives to nouns</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ance/-ancy	state or quality of	abundance, attendance, constancy, dominance, elegance, expectancy, hesitancy, infancy, relevance, vacancy
-cy/-acy	state or quality of	accuracy, bankruptcy, conspiracy, currency, delicacy, excellency, obstinacy, profligacy, supremacy
-cy/-acy	action or process	diplomacy, piracy, truancy, vagrancy
-ence/-ency	state or quality of	absorbency, buoyancy, clemency, consistency, corpulence, expediency, fluency, frequency, prominence, reticence, subsistence, truancy, vacancy, vagrancy
-ery/-ry	state or quality of collectivity	bravery, butchery, carpentry, forgery, greenery, masonry, savagery, slavery
-escence	state or quality of	acquiescence, coalescence, convalescence, deliquescence, effervescence, fluorescence
-icity	state or quality of	historicity, electricity
-iety	state or quality of	anxiety, dubiety, piety, propriety, sobriety, variety
-ion	state or quality of	abjection, ambition, champion, companion, contrition, discretion, dissolution, resolution, suspicion
-ism	state or quality of	altruism, Americanism, archaism, baptism, colloquialism, despotism heroism, monetarism, mysticism, racism, truism, Witticism
-ity/-ty	state or quality of	fluidity, humidity, infirmity, morbidity, normality, seniority
-ity/-ty	state or quality of	agility, amnesty, capacity, diversity, ductility, honesty, infinity, loyalty, nudity, plurality, profanity, purity, unity
-ment	state or quality of	amazement, amusement, betterment, instrument, merriment, ornament, predicament

**Table 3-9 Conversion of adjectives to nouns (continued)**

Suffix	Meaning	Examples
-ness	state of being, condition, quality of	beastliness, bitterness, brightness, business, correctness, darkness, deafness, dimness, fairness, goodness, happiness, happiness, idleness, kindness, loveliness, saintliness, slowness, sprightliness

## (4) Conversion of adjectives to nouns

**Table 3-10 Conversion of adjectives to nouns**

Suffix	Meaning	Examples
-a	plural	criteria, data, memoranda
-ade	action or process	blockade, escapade, parade, promenade
-ade	product or thing	lemonade, marmalade
-ae	plural (feminine)	algae, alumnae, formulae, larvae
-arium/-orium	locative, a place for, connected with	aquarium, auditorium, crematorium, emporium, honorarium, planetarium, solarium, vivarium
-ary	place for	infirmary, library, mortuary, sanctuary
-cle	small	corpuscle, cubicle, icicle, particle
-cule	small	minuscule, molecule
-ectomy	surgical removal of	appendectomy, mastectomy, tonsillectomy
-er	action or process	murder, plunder, thunder, waiver
-et	small	bassinet, cygnet, midget, sonnet
-ette	small (female)	cigarette, dinette, majorette
-eur	one who	grandeur, hauteur
-i	plural	alumni, foci
-ia	condition of	euphoria
-ide	chemical	bromide, compound, fluoride, peroxide
-ine	chemical, basic substance	caffeine, chlorine, iodine, quinine
-ing	material	bedding, frosting, roofing, stuffing
-ish	near, like, almost	pinkish

**Table 3-10 Conversion of adjectives to nouns (continued)**

<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ite	mineral or rock	anthracite, bauxite, granite
-itis	inflammation of	arthritis, bronchitis, laryngitis
-ization	state or quality of	civilization, organization, standardization
-kin	small	lambkin, manikin, Munchkin, napkin
-let	diminutive, small	booklet, driblet, islet, leaflet, owlet, rivulet, starlet
-ling	small	duckling, fledgling, suckling, yearling
-mat	automatic machine	laundromat
-mony	product or thing	alimony, ceremony, matrimony, testimony
-ol	alcohols	ethanol, glycol, methanol
-ology	study or science of	biology, psychology
-or	state or quality of	candor, error, fervor, pallor, stupor
-ory	place for	conservatory, depository, laboratory, purgatory
-ose	sugars	dextrose, fructose, glucose, sucrose
-osis	abnormal increase	fibrosis, tuberculosis
-ocracy/-oscracy	rule	aristocracy, arithmocracy, democracy, hetaerocracy, hierocracy, mesocracy, theocracy, stratocracy,
-phobia	fear of	acrophobia, anthropophobia, aquaphobia, claustrophobia, dementophobia, herpetophobia, hydrophobia, phonophobia, psychphobia, pyrophobia, xenophobia
-th	state or quality of	depth, filth, length, truth, strength, warmth
-tude	state or quality of	attitude, beatitude, fortitude, gratitude

### 2.2.2 Verb suffixes

#### (1) Conversion of nouns to verbs

<b>Table 3-11 Conversion of nouns to verbs</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ate	to make, to cause to happen	activate, annihilate, carbonate, contaminate, create, fascinate, frustrate, hyphenate, liberate, liquidate, originate, perpetuate, private, terminate
-en/-n	to make	frighten, heighten, lengthen, strengthen
-fy/-ify	to make, to cause to (be)	beautify, classify, dignify, exemplify, glorify, solidify, stupefy
-ize/-ise	to make, to cause to be	advertise, advertise, carbonize, computerize, idolize, legalize, liquidize, memorize, merchandise, miniaturize, popularize, popularize, standardize, sterilize, vaporise, weatherize

#### (2) Conversion of adjectives to verbs

<b>Table 3-12 Conversion of adjectives to verbs</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-en	to make	blacken, brighten, chasten, cheapen, darken, deafen, deepen, fasten, frighten, loosen, quicken, ripen, sharpen, shorten, soften, thicken, tighten, weaken, whiten
-fy/-ify	to make, to cause to (be)	amplify, falsify, liquefy, modify, purify, sanctify, satisfy, terrify, verify
-ise/-ize	to make	modernise

## (3) Other verb suffixes

**Table 3-13 Other verb suffixes**

Suffix	Meaning	Examples
-ade	action or process	blockage, parade, promenade
-age	action or process	pillage, ravage
-ble	repeated action	fumble, mumble, squabble, stumble, tumble
-en	past completed action	eaten, proven, stolen, taken
-er	action or process	conquer, deliver, discover, murder
-ing	action or process	eating, jumping, singing, talking
-ish	action or process	finish, flourish, nourish, punish
-le	frequentative and diminutive force	giggle, hobble, prattle, wriggle

## 2.2.3 Adjectives suffixes

## (1) Conversion of nouns to adjectives

**Table 3-14 Conversion of nouns to adjectives**

Suffix	Meaning	Examples
-al/-ial	having the property of	conjectural, dialectal, educational, fraternal, ministerial
-an/-ian	belonging to, resembling	Alaskan, American, Augustan, patrician, plebeian, reptilian, urban, veteran
-ary/-ar	relating to, having a tendency or purpose	budgetary, dietary, discretionary, elementary, honorary, inflationary, linear, literary, military, molecular, nuclear, ordinary, rudimentary, secondary, spatula, tributary, unitary, vehicular
-ate	full of, to make	affectionate, extortionate, passionate
-en	relating to	ashen, earthen, golden, wooden
-esc	become	coalesce, tumescent
-ese	state or quality of	Chinese, Japanese, journalese, Portuguese, Siamese
-esque	having the style of	lawyer-esque, picturesque, Romanesque, statuesque, statuesque
-iac	pertaining to the property	elegiac, hypochondriac, maniac

**Table 3-14 Conversion of nouns to adjective (continued)**

Suffix	Meaning	Examples
-ic	relating to, having the property resembling	aesthetic, alcoholic, angelic, atheistic, athletic, comic, dramatic, economic, geographic, gigantic, harmonic, heroic, historic, melodic, naturalistic, poetic, public, tonic
-ical/-ual	state or quality of, having the property of	acoustical, agricultural, analytical, comical, commercial, economical, ethical, mathematical, physical, political, rhetorical, sensual
-ish	relating to, to become, like, resembling	boyish, childish, churlish, fiftyish, foolish, Irish, modish, Scottish, whitish
-ive	characterized, inclined to	abusive, active, affirmative, constructive, contradictory, effective, motive, native, negative, passive, retrospective
-ful	relating to, full of	beautiful, careful, doubtful, eventful, fearful, hateful, joyful, peaceful, powerful, skillful, thoughtful, wonderful
-less	without, free from	ageless, artless, careless, colorless, doubtless, effortless, fanciful, fatherless, faultless, fearless, homeless, keyless, sinless, tasteless, thoughtless, tireless
-like	resembling	boylike, childlike, homelike, lifelike
-ly	appropriate to, befitting, resembling	crazy, curly, fatherly, foggy, friendly, funny, heavenly, manly, milky, motherly, pudgy, risky, scholarly, shapely, shiny, sleazy, sudsy, timely, womanly
-ly	every	daily, monthly, weekly, yearly
-oid	having the shape of	asteroid, humanoid, paranoid, planetoid
-ory	connected with, place for	dormitory, illusory, inflammatory, lavatory, obligatory, refectory
-ose	full of, abounding in	bellicose, comatose, jocose, morose, verbose

**Table 3-14 Conversion of nouns to adjectives (continued)**

Suffix	Meaning	Examples
-ous	full of, possessing the quality of	anomalous, avaricious, capricious, clamorous, disastrous, dolorous, glamorous, glorious, humorous, lustrous, malicious, mischievous, numerous, perilous, piteous, poisonous, porous, portentous, spacious
-tive	having	adventurous, fibrous, torturous, virtuous
-ulent	full of	glorious, grievous, joyous, nervous, poisonous, precious, serious, various, wondrous
-y	state or quality of	corpulent, fraudulent, fruity, funny, gooey, healthy, mighty, moody, prospective, rainy, sunny, turbulent

## (2) Conversion of verbs to adjectives

**Table 3-15 Conversion of verbs to adjectives**

Suffix	Meaning	Examples
-able/-ible	capable of, quality of, fit for doing, fit for being done, able to be done, can be done	abominable, acceptable, admirable, admissible, agreeable, appreciable, bookable, calculable, collapsible, comfortable, comparable, comprehensible, debatable, defensible, demonstrable, describable, drinkable, educable, enforceable, favourable, forcible, honourable, incalculable, incredible, invisible, lovable, movable, ommissible, peaceable, pitiable, pronounceable, provable, reliable, renounceable, reprehensible, traceable, traceable, usable, visible, washable
-al	relating to	critical, equivocal, moral, partial, natural, royal, maternal, suicidal, global, logical

<b>Table 3-15 Conversion of verbs to adjectives (continued)</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ant/-ent	inclined to	buoyant, competent, decadent, defiant, deliquescent, different, effervescent, excellent, pleasant, repentant, vigilant
-ed	having	continued, spirited
-ful	full of, having	mournful, vengeful
-ive/-ative	inclined to	admissive, affirmative, alternative, apprehensive, comprehensive, conclusive, confirmative, conservative, constructive, creative, cumulative, curative, decisive, decorative, defensive, demonstrative, divisive, exclusive, expressive, inclusive, indicative, instructive, offensive, pejorative, pensive, permissive, possessive, preservative, preventive, representative, restorative, speculative, submissive, talkative
-ory	having to do with, characterized by	declamatory, exclamatory, explanatory, inhibitory, retaliatory
-ous	full of	cumbrous, disastrous, joyous, nervous, permissible, piteous, ponderous, pretentious, virtuous, wondrous
-some	inclined to, like, characterized by	awesome, bothersome, cumbersome, fearsome, gruesome, meddlesome, quarrelsome, tiresome

### (3) Other adjective suffixes

<b>Table 3-16 Other adjective suffixes</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-acious	inclined to	audacious, fallacious, loquacious, mendacious
-ble	inclined to	durable, gullible, perishable, volatile
-ern	direction	eastern, northern, postern, western
-etic	relating to	alphabetic, dietetic, frenetic

**Table 3-16 Other adjective suffixes (continued)**

Suffix	Meaning	Examples
-ial	relating to	commercial, filial, remedial
-ian	relating to	barbarian, Christian, physician,
-ide	state or quality of	candid, lucid, rigid, sordid, splendid
-ile	state or quality of	agile, docile, fragile, virile, volatile
-ine	relating to	bovine, feline, feminine, marine
-ious	state or quality of	ambitious, gracious, religious
-most	most	innermost, utmost, westernmost
-nous	state or quality of	contemptuous, sensuous, tempestuous
-th/-eth	numbers	fifth, fiftieth, twelfth, twentieth
-ular	relating to	cellular, circular, granular, popular
-und	state or quality of	fecund, jocund, moribund, rotund
-ward	direction	backward, eastward, forward, upward

#### 2.2.4 Adverb suffixes

**Table 3-17 Adverb suffixes**

Suffix	Meaning	Examples
-ly	to make more	quickly, quietly, directly
-ward (s)	in the direction of	afterward, onwards, northward
-ways	manner	sideways, always, long ways, crossways

### Common Suffixes

Most common suffixes found in frequently used words are as follows: (Blevins, 2001; Carroll, Davies & Richman, 1971; Kieffer & Lesaux, 2007; White, Sowell & Yanagihara, 1989)

#### 1. Highest frequency use

**Table 3-18 Highest frequency use**

Suffix	Meaning	Examples
-s	plurals	boys
-ed	past tense	wanted
-ing	present tense	playing

## 2. High frequency use

<b>Table 3-19 High frequency use</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ly	characteristic of	friendly
-er/-or	person	teacher
-ion/-tion	act, process	action
-ible/-able	can be done	likeable

## 3. Medium frequency use

<b>Table 3-20 Medium frequency use</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ic	having characteristics of	comic
-ous/-eous/ -ious	possessing the qualities of	serious
-en	made of	enliven
-ive/-ative/ -itive	adjective form of a noun	attentive
-ful	full of	sorrowful
-less	without	hopeless

## List of Suffixes by Level

According to Fry & Kress (2006), provides a list of derivational suffixes; the beginner level comprises with the most frequently occurring suffixes and the intermediate to advanced levels of English language learning which comprises less frequently used but still quite common. The lists are as follows:

### 1. Beginner level suffixes

<b>Table 3-21 Beginner level suffixes</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-able/-ible	is, can be	climbable, combustible, comfortable, durable, gullible, learnable, perishable
-ar/-er/-or	one who	actor, beggar, doctor, editor, liar, painter, seller, shipper, teacher
-en	to make	fasten, frighten, lengthen, strengthen, weaken

**Table 3-21 Beginner level suffixes (continued)**

Suffix	Meaning	Examples
-er	more	closer, lighter, luckier, quicker, smarter, softer,
-ess	one who (female)	actress, countess, hostess, princess, waitress
-est	most	closest, lightest, luckiest, quickest, smartest, softest
-ette	small	barrette, dinette, diskette, majorette
-ful	full of	careful, cheerful, fearful, joyful, thoughtful
-less	without	ageless, careless, joyless, thoughtless, tireless
-like	resembling	childlike, computer like, homelike, lifelike
-ly	resembling	brotherly, fatherly, motherly, scholarly, sisterly
-ment	action or process	development, experiment, government
-ness	state or quality of	darkness, fullness, goodness, happiness, kindness
-ship	state or quality of	citizenship, friendship, hardship, internship

## 2. Intermediate to advanced level suffixes

**Table 3-22 Intermediate to advanced level suffixes**

Suffix	Meaning	Examples
-a,/-ae	plural	algae, alumnae, criteria, data, formulae, memoranda
-acious	inclined to	audacious, fallacious, loquacious, mendacious
-ade	action or process	escapade, promenade
-age	action or process	blockage, marriage, pilgrimage, rummage, voyage
-an	relating to	American, Hawaiian, Metropolitan, urban, veteran
-ance/-ence	state or quality of	absence, annoyance, repentance, resistance, reticence, violence

<b>Table 3-22 Intermediate to advanced level suffixes (continued)</b>		
<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ancy/-ency	state or quality of	bouyance, clemency, consistency expediency, frequency, truancy, vacancy, vagrancy
-ant	inclined to	buoyant, defiant, observant, pleasant, vigilant
-ee	object of action	advisee, employee, lessee, payee, trainee
-ence	female	comedienne, equestrienne, tragedienne
-er	action or process	flounder, murder, plunder, thunder waiver
-ble	repeated action	fumble, mumble, squabble, stumble, tumble
-dom	state or quality of	boredom, freedom, martyrdom, wisdom
-ectomy	surgical removal of	appendectomy, mastectomy, tonsillectomy
-ary/-ory	place for	conservatory, infirmary, laboratory, library, mortuary
-ation/-sion/ -ion/-tion	state or quality of	attention, caution, companion, desperation, fascination, inspiration, starvation, suspicion
-ative	inclined to	demonstrative, pejorative, talkative
-ant/-ent	one who	assistant, immigrant, merchant, regent, resident, servant, superintendent
-arian	one who	humanitarian, libertarian, librarian
-arium/ -orium	place for	aquarium, auditorium, planetarium, solarium
-ern	direction	eastern, northern, postern, western
-ery	state or quality of	bravery, forgery, savagery, slavery
-ese	state of quality of	Chinese, Japanese, Portuguese, Siamese
-esque	relating to	picturesque, Romanesque, statuesque
-etic	relating to	alphabetic, athletic, dietetic, frenetic, sympathetic
-hood	state or quality of	adulthood, childhood, falsehood, nationhood

**Table 3-22 Intermediate to advanced level suffixes (continued)**

<b>Suffix</b>	<b>Meaning</b>	<b>Examples</b>
-ial/-ian	relating to	barbarian, Christian, commercial, filial, remedial
-ic/-ical	relating to	comic, economical, historic, poetic, public, rhetorical
-ics	scientific, social system	economics, graphics, physics, politics, statistics
-ide/-ine	chemical compound	chlorine, fluoride, iodine, peroxide, quinine, sulfide
-ina/-ine	female	ballerina, czarina, heroine, Josephine Wilhelmina
-ify	to make	beautify, falsify, satisfy, terrify, vilify
-ious	state or quality of	ambitious, gracious, nutritious, religious
-ism	doctrine of	capitalism, communism, patriotism, socialism
-ist	one who practices	biologist, capitalist, communist, philanthropist
-itis	inflammation of	appendicitis, arthritis, bronchitis, laryngitis
-ity/-ty	state or quality of	amnesty, civility, honesty, loyalty, necessity, parity, unity
-ive	inclined to	active, negative, passive, positive, restive
-ization	state or quality of	civilization, organization, standardization
-ize	to make	computerize, popularize, pulverize, standardize
-ling	small	duckling, fledgling, suckling, yearling
-most	most	foremost, innermost, utmost, westernmost
-oid	resembling	asteroid, humanoid, paranoid, planetoid
-ose	sugars	dextrose, fructose, glucose, sucrose
-ous	full of	joyous, nervous, virtuous, wondrous
-phobia	fear of	acrophobia , claustrophobia
-some	inclined to	awesome, fulsome, meddlesome, tiresome
-th/-eth	numbers	fifth, fiftieth, twelfth, twentieth
-ulent	full of	corpulent, fraudulent, truculent, turbulent

**Table 3-22 Intermediate to advanced level suffixes (continued)**

Suffix	Meaning	Examples
-und	state or quality of	fecund, jocund, moribund, rotund
-uous	state or quality of	contemptuous, sensuous, tempestuous, vacuous
-ure	action or process	censure, endure, inure, procure, secure
-ward	direction	backward, eastward, forward, onward upward
-ways	manner	crossways, long ways, sideways
-wise	manner, direction	clockwise, counterclockwise, lengthwise
-y	being, having	chewy, fruity, funny, gooey, rainy, sunny

## Guidelines in Adding Suffixes

Keep all the letters when adding a suffix because most words do not change spelling when a suffix is added. For example: *accidental + -ly = accidentally*, *dark + -ness = darkness*, *ski + -ing = skiing*, *foresee + -able = foreseeable*. Nevertheless, there are some exceptions in adding suffixes. McLean (2011), Nelson (2001, 2011), Rozakis (2003), and Umera-Okeke (2007) indicate guidelines to add suffixes as follows:

### 1. Ending in a “y” or a silent “e.”

1.1 If the letter before the final “y” is a consonant, change the “y” to “i” and add the suffix.

<b>Examples:</b>	<i>hurry + i + -ed</i>	=	<i>hurried</i>
	<i>hurry + -ing</i>	=	<i>hurrying</i>
	<i>greedy + i + -ly</i>	=	<i>greedily</i>
	<i>ready + -ly</i>	=	<i>readily</i>
	<i>happy + -ness</i>	=	<i>happiness</i>
	<i>sunny + -er</i>	=	<i>sunnier</i>
	<i>early + -est</i>	=	<i>earliest</i>

\* However, there are exceptions, such as *dryly*, *dryness*, *shyly*, *shyness*, *babyish*, *ladylike*.

1.2 If the letter before the final “y” is a vowel, do not change the “y” before attaching a suffix.

<b>Examples:</b>	play + <i>-ing</i>	=	playing
	destroy + <i>-ed</i>	=	destroyed

\* However, there are exceptions, such as laid, paid, said, mislaid, underpaid, unsaid.

2. If the suffix begins with a vowel, drop the silent “e” in the root word.

<b>Examples:</b>	write + <i>-ing</i>	=	writing
	care + <i>-ing</i>	=	caring
	love + <i>-able</i>	=	lovable
	use + <i>-age</i>	=	usage
	use + <i>-able</i>	=	usable
	close + <i>-er</i>	=	closer
	value + <i>-able</i>	=	valuable
	change + <i>-ed</i>	=	changed

3. When the word ends in “ce” or “ge,” keep the “e” if the suffix begins with “a” or “o”:

<b>Examples:</b>	notice + <i>-able</i>	=	noticeable
	manage + <i>-able</i>	=	manageable
	advantage + <i>-ous</i>	=	advantageous

\* However, there are exceptions, such as acreage, mileage, singeing, canoeing, hoeing.

4. If the suffix begins with a consonant, keep the silent “e” in the original word.

<b>Examples:</b>	excite + <i>-ment</i>	=	excitement
	argue + <i>-ment</i>	=	argument
	care + <i>-ful</i>	=	careful
	care + <i>-less</i>	=	careless
	fierce + <i>-ly</i>	=	fiercely
	infinite + <i>-ly</i>	=	infinitely
	true + <i>-ly</i>	=	truly
	trite + <i>-ness</i>	=	triteness

\* However, there are exceptions such as silent “e” after “u” or “w” as in argument, duly, truly, wholly.

5. If the word ends in “ie,” drop the “e” and change the “i” to “y.”

<b>Examples:</b>	die + y + -ing	=	dying
	tie + y + -ing	=	tying

6. Keep the final “e” when the word ends in “ee” or “oe,” before the suffix “-ing,” and with words ending in “ce” or “ge” that have suffixes beginning with “a” or “o.”

<b>Examples:</b>	see + -ing	=	seeing
	woe + -ful	=	woeful
	trace + -able	=	traceable
	replace + -able	=	replaceable
	courage + -ous	=	courageous

7. Add “-ly” to change an adjective to an adverb.

<b>Examples:</b>	brave + -ly	=	bravely
	calm + -ly	=	calmly
	quiet + -ly	=	quietly
	soft + -ly	=	softly

7.1 If the adjective ends in “ic,” add “al” before “-ly.”

<b>Examples:</b>	basic + al + -ly	=	basically
	dramatic + al + -ly	=	dramatically
	emphatic + al + -ly	=	emphatically
	enthusiastic + al + -ly	=	enthusiastically
	drastic + al + -ly	=	drastically
	linguistic + al + -ly	=	linguistically
	realistic + al + -ly	=	realistically
	scientific + al + -ly	=	scientifically
	specific + al + -ly	=	specifically

7.2 If the adjective ends in “-ble,” change “-ble” to “-bly.”

<b>Examples:</b>	able + -ly	=	ably
	noble + -ly	=	nobly

7.3 When adding “-ly” to a word that ends in a single “l,” keep the “l.” If the word ends in a double “l,” drop one “l.” If the word ends in consonant “le,” drop the “le.”

<b>Examples:</b>	partial + -ly	=	partially
	dull + -ly	=	dully
	dangle + -ly	=	dangly
	travel + -ed	=	travelled

marvel + *-ing* = marveling

\* **Exceptions:** In American English, the final “*l*” is not double.

7.4 If the adjective ends in “*y*,” change “*y*” to “*i*.”

**Examples:** steady + *-ly* = steadily  
 weary + *-ly* = wearily  
 happy + *-ly* = happily

8. If a word ends in “*ic*,” insert a “*k*” after the “*c*.”

**Examples:** mimic + *k* + *-ing* = mimicking  
 traffic + *k* + *-ing* = trafficking

9. There is only one hint for adding “*-able*” or “*-ible*”: an adjective usually ends in “*-able*” if you can trace it back to a noun ending in “*-ation*.” *Sensible* is the exception.

**Examples:** adopt + adaptation + *-able* = adoptable  
 commend + commendation + *-able* = commendable

10. Double the final consonant if:

10.1 In a one-syllable word, double the final consonant before a suffix beginning with a vowel.

**Examples:** plan + *-er* = planner  
 wet + *-er* = wetter  
 big + *-est* = biggest  
 red + *-est* = reddest  
 stop + *-ing* = stopping  
 shop + *-ing* = shopping  
 rub + *-ed* = rubbed  
 stop + *-ed* = stopped

\* **Exceptions:** Do not double the final consonant if it comes after two vowels or another consonant such as failed, stooped, warmer, and lasting.

10.2 In a word of two or more syllables, double the final consonant only if it is in an accented syllable before a suffix beginning with a vowel.

**Examples:** defer + *r* + *-ed* = deferred  
 resubmit + *t* + *-ing* = resubmitting  
 prefer + *r* + *-ed* = preferred

\* **Exceptions:** Do not double the final consonant if it comes after two vowels or another consonant, such as obtained, concealed, abducting, canceled, and commendable.

10.3 If the original word is a prefixed one-syllable word.

**Examples:** regret + *-ing* = regretting

11. Do not double the final consonant if:

11.1 The accent is not on the last syllable or the accent shifts when the suffix is added.

**Examples:** confer + *-ence* = conference

11.2 The final consonant is “x” or “w.”

**Examples:** row + *-ing* = rowing

11.3 The original word ends in a consonant and the suffix begins with a consonant.

**Examples:** ship + *-ment* = shipment

11.4 The original word ends in “a” or “o.”

**Examples:** conceal + *-ed* = concealed

reveal + *-ing* = revealing

cool + *-ed* = cooled

## Summary

This chapter has discussed the important role of suffixation in the word formation process in English. Suffixes and classification of suffixes have been discussed. Derivational suffixes including class-maintaining and class-changing are commonly classified into noun suffixes, adjective suffixes, verb suffixes and adverb suffixes. Inflections added to root words to pluralize, change tense or mark comparative and superlative forms of adjectives were also discussed. The list of suffixes for beginning and intermediate, to advanced levels are also provided as well as guidelines for adding suffixes.

## Exercises

### Exercise 3-1: Suffixes

**Directions:** Write the suffix and meaning of each suffix.

- |              |               |                |
|--------------|---------------|----------------|
| 1. stronger  | Suffix: _____ | Meaning: _____ |
| 2. Japanese  | Suffix: _____ | Meaning: _____ |
| 3. softly    | Suffix: _____ | Meaning: _____ |
| 4. memorize  | Suffix: _____ | Meaning: _____ |
| 5. originate | Suffix: _____ | Meaning: _____ |

### Exercise 3-2: Suffixes

**Directions:** Use one of the words from the list to complete each sentence.

*Japanese / memorize / originate / softly / stronger*

1. She spoke \_\_\_\_\_ or in a quiet way.
2. Generally, men are \_\_\_\_\_, having more physical power than women.
3. Mori is a \_\_\_\_\_ girl from Osaka.
4. To \_\_\_\_\_ is to learn something carefully so that you can remember it exactly.
5. The word ‘\_\_\_\_\_’ means to happen or appear for the first time in a particular place or situation.

### Exercise 3-3: Inflectional suffixes

**Directions:** Underline the suffix of each **bold** word in each sentence and write the grammatical function of the suffix in the space provided.

1. My sister **cleaned** her room yesterday.  
Grammatical Function: \_\_\_\_\_.
2. He has **studied** French.  
Grammatical Function: \_\_\_\_\_.
3. My house is **smaller** than hers.  
Grammatical Function: \_\_\_\_\_.
4. This is the **biggest** book I have ever seen.  
Grammatical Function: \_\_\_\_\_.
5. She bought many **books** from the Book Fair.  
Grammatical Function: \_\_\_\_\_.

**Exercise 3-4: Creating new words with suffixes**

**Directions:** Add the suffix to the base word and indicate the part of speech of each word. Remember that in some cases, the spelling of the base word may change slightly when the suffix is added. Consult the dictionary if you are unsure of the spelling.

- |                   |         |                      |
|-------------------|---------|----------------------|
| 1. destroy + -ed  | = _____ | Part of speech _____ |
| 2. plan + -er     | = _____ | Part of speech _____ |
| 3. notice + -able | = _____ | Part of speech _____ |
| 4. argue + -ment  | = _____ | Part of speech _____ |
| 5. happy + -ness  | = _____ | Part of speech _____ |

**Exercise 3-5: Creating new words with suffixes**

**Directions:** For each word, create at least two new words by adding or changing suffixes and indicate the part of speech for each new word.

1. crate: \_\_\_\_\_
2. kind: \_\_\_\_\_
3. govern: \_\_\_\_\_
4. prevent: \_\_\_\_\_
5. beauty: \_\_\_\_\_

**Exercise 3-6: Class-maintaining suffixes**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

**Column A**

1. \_\_\_ friendship
2. \_\_\_ foolish
3. \_\_\_ childhood
4. \_\_\_ handful
5. \_\_\_ freedom

**Column B**

- a. state of being a child; time during which one is a child
- b. condition of being free
- c. as much or many as can be held in one hand; small number
- d. without reason, sense, or good judgement; silly
- e. being friends; the feeling or relationship that exists between friends

**Exercise 3-7: Class-maintaining suffixes**

**Directions:** For each of the following sentences choose the word from the list below that best fits the context.

*childhood / foolish / freedom / friendship / handful*

1. My sister has a close \_\_\_\_\_ with our aunt.
2. She had a very happy \_\_\_\_\_.
3. My mother is very strict, so my brother and I do not have the \_\_\_\_\_ to do just what we like.
4. She pulled out a \_\_\_\_\_ of candies from her bag for the children.
5. She was very \_\_\_\_\_ to go out in a backyard in the heavy rain.

**Exercise 3-8: Verb suffixes**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

**Column A**

1. \_\_\_ giggle
2. \_\_\_ modernize
3. \_\_\_ deepen
4. \_\_\_ sharpen
5. \_\_\_ verify

**Column B**

- a. make or become sharp
- b. laugh in nervous and silly way
- c. make or establish as true
- d. to make something have a sharper edge or point
- e. to make something more modern

**Exercise 3-9: Verb suffixes**

**Directions:** For each of the following sentences choose a word from the list below that best fits the context.

*deepen / giggling / modernized / sharpen / verify*

1. My colored pencils are blunt; I'll have to \_\_\_\_\_ them.
2. We were \_\_\_\_\_ uncontrollably when she started to sing.
3. Are you able to \_\_\_\_\_ your account?
4. I need more money to \_\_\_\_\_ my old house.
5. Mary liked Tom very much but she did not want the relationship to \_\_\_\_\_.

**Exercise 3-10: Adjective suffixes**

**Directions:** For each of the following sentences choose a word from the list below that best fits the context.

*beautiful / homeless / religious / talkative / visible*

1. If you are \_\_\_\_\_, it means that you have nowhere to live.
2. She is a very \_\_\_\_\_ person. She never shuts up!
3. The sign was clearly \_\_\_\_\_ and can be read easily.
4. If something is \_\_\_\_\_, it can be very attractive.
5. \_\_\_\_\_ education refers to education relating to spirituality.

**Exercise 3-11: Adjective suffixes**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*beautiful / homeless / religious / talkative / visible*

1. I am a \_\_\_\_\_ person and I believe in life after death.
2. When you are cycling at night, you should wear use lights to be more \_\_\_\_\_.
3. She has created such a \_\_\_\_\_ bunch of flowers for my birthday.
4. The picture showed many \_\_\_\_\_ people sleeping on the streets.
5. She is a lively and \_\_\_\_\_ person.

**Exercise 3-12: Noun suffixes**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*booklet / capacity / correctness / runner / strengthen*

1. He has an enormous \_\_\_\_\_ or ability to do hard work.
2. The exercise is designed to \_\_\_\_\_ or makes your stomach muscles stronger.
3. A \_\_\_\_\_ is a person who takes part in a foot race.
4. Before you use your new phone, you should read the instructions in the \_\_\_\_\_ or a small book, usually with a paper cover.
5. I always try to check my essays for accuracy and grammatical \_\_\_\_\_ before submit them to a teacher.

**Exercise 3-13: Noun suffixes****Directions:** Use word from the list to complete the meanings of each sentence.*booklet / capacity / correctness / runner / strengthen*

1. The \_\_\_\_\_ of the information is guaranteed by the committee.
2. She has a great \_\_\_\_\_ for this challenging project.
3. The organization's aim is to \_\_\_\_\_ the cultural ties between Thailand and Laos.
4. My sister is a long-distance \_\_\_\_\_.
5. The \_\_\_\_\_ of the show is free of charge.

**Exercise 3-14: Adverb suffixes****Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.**Column A**

1. \_\_\_\_ sideways
2. \_\_\_\_ clockwise
3. \_\_\_\_ direct
4. \_\_\_\_ onwards
5. \_\_\_\_ quickly

**Column B**

- a. at a fast speed
- b. to go forwards
- c. from one side to another
- d. in the direction in which the hands of the clock move
- e. going in a straight line towards somewhere or someone without stopping or changing direction

**Exercise 3-15: Adverb suffixes****Directions:** Use a word from the list to complete the meanings of each sentence.*clockwise / directly / onwards / quickly / sideways*

1. We are late so we have walk \_\_\_\_\_ to get there on time.
2. We walked \_\_\_\_\_ to the bank of the river.
3. If you would move \_\_\_\_\_ to the right of Michaela, I can get everyone in the picture.
4. To open this room you have to turn the key \_\_\_\_\_.
5. When my mom gets angry, she will look \_\_\_\_\_ at me.

**Exercise 3-15: Adverb suffixes****Directions:** Use a word from the list to complete the meanings of each sentence.*clockwise / directly / onwards / quickly / sideways*

1. We are late so we have walk \_\_\_\_\_ to get there on time.
2. We drove \_\_\_\_\_ in an easterly direction.
3. If you would move \_\_\_\_\_ to the right of Michaela, I can get everyone in the picture.
4. To open this room you have to turn the key \_\_\_\_\_.
5. When my mom gets angry, she will look \_\_\_\_\_ at me.

**Exercise 3-16: Intermediate to advanced suffixes****Directions:** Study the suffixes and their meaning provided, and choose a word to complete each sentence. (Change the word to fit the sentence if necessary)

<b>Suffix</b>	<b>Word</b>	<b>Meaning</b>
-ancy/-ency	frequency	the number of times something happens within a particular period
-ee	employee	one who is employed for salary
-ation	inspiration	a good idea about what you should do, write, say
-tant	assistant	someone who helps someone else to do a job
-ic/-ical	public	relating to or involving people in general
-ious	nutritious	containing many of the substances needed for life and growth
-ity/-ty	loyalty	the quality of being loyal
-ive	positive	full of hope and confidence
-ize	standardize	to make things of the same type all have the same basic features
-oid	paranoid	believing unreasonably that you cannot trust other people, or that they are trying to harm you or have a bad opinion of you

1. An \_\_\_\_\_ who wants to take leave or a day off should contact the Personnel Department.
2. If you are \_\_\_\_\_ about things, you are hopeful and think about what is good in a situation rather than what is bad.
3. This issue is in the \_\_\_\_\_ interest.
4. You should eat whole meal bread because it is more \_\_\_\_\_ than white bread.
5. Einstein has always been a source of my \_\_\_\_\_.

6. Penny has always been \_\_\_\_\_ about her marriage.
7. His \_\_\_\_\_ to the organization is very impressive.
8. The \_\_\_\_\_ of serious road accidents in the town is high.
9. My mother is looking for a personal \_\_\_\_\_ with good organizational and good English skills.
10. TOEFL and TOEIC are \_\_\_\_\_ tests.

### **Exercise 3-17: Reading and vocabulary**

**Directions:** Read the following passage and use your knowledge of suffixes to identify the meaning of each of the word in boldfaced type. Use a dictionary if necessary.

Stress is defined as a mental and physical **condition** that occurs when an adjustment or adaptation must be made to the environment. Unpleasant conditions or events cause stress, as, for example, financial problems, a divorce, health issues, or pressure at work. However, a certain amount of stress occurs even when the adjustment is to a condition that is perceived as **desirable**. Exercise, dating, moving to a new home, or taking a trip are all **stressful** situations. Although short-term stress is **usually harmless**, the consequences of long-term stress can be dangerous to health. Factors that decrease the consequences of stress are the ability to predict stressful situations and the level of control over them that can be achieved. (Sharpe, 2013, 2010, 2006, p. 396)

1. condition: \_\_\_\_\_
2. desirable: \_\_\_\_\_
3. stressful: \_\_\_\_\_
4. usually: \_\_\_\_\_
5. harmless: \_\_\_\_\_

### **Exercise 3-18: Create the sentences**

**Directions:** Write sentences using the words provided.

1. condition: \_\_\_\_\_
2. desirable: \_\_\_\_\_
3. stressful: \_\_\_\_\_
4. usually: \_\_\_\_\_
5. harmless: \_\_\_\_\_



## Chapter 4

### Greek and Latin Roots

#### **Introduction**

Roots are the building blocks of the English language. Every word has at least one and most academic words have Latin or Greek roots as well as some other languages. Learning and understanding the meaning of common root words is the key to increasing the number of words that can be added to someone's vocabulary bank and help learners unlock thousands of previously unknown words. Root words can be found at the beginning, in the middle, or at the end of words. There are many root words in the English vocabulary as described in Chapter 1, however in this chapter, roots will be discussed in more detail.

#### **Greek and Latin Roots**

Roots are the base word containing the core meaning of the word. Prefixes and suffixes are often added to alter or improve the meaning of the word. Greek and Latin roots are bound morphemes that cannot stand alone as words in English; they have to appear in combination with one or more affixes. Words of Greek and Latin origin are especially prevalent in English. Further, Calfee (1981-1984) indicated that Greek roots are specialized words which are commonly used in science and combining forms are compounded. Latin roots however are technical, sophisticated words used primarily in more formal contexts as in literature and textbooks. About 60 percent of the words in English texts are of Greek and Latin origin (Henry, 1997) and a relatively small number of Greek and Latin roots appear in hundreds of thousands of commonly used words. (Henry, 2003) According to Graves and Fitzgerald (2006), school texts and reading materials include more than 180,000 different words. Since most of the words found in these texts come to English from Latin and Greek roots, knowledge of these word parts is a powerful tool in unlocking the complex vocabulary of academic words in English. Moreover, using roots to unlock word meanings will do more to expand students' academic vocabularies, improve their analysis skills, and enrich their overall English vocabulary. An example of a root word is *pect*, a Latin word meaning 'to see' and which helps learn the meaning of *respect*, *inspect*, *spectator*, *spectacular*, *introspective*, *spectacles* and *retrospective*. (Henry, 2003)

#### **Frequently Occurring Roots**

Most modern English words originated in other languages. The following lists of Greek and Latin roots occur frequently and can form the basis for a number of vocabulary-building lessons. (Fry & Kress, 2006; Stahl & Shield, 1992)

<b>Table 4-1 Frequently occurring Greek and Latin roots</b>			
<b>Base</b>	<b>Origin</b>	<b>Meaning</b>	<b>Examples</b>
aero	Greek	air, wind	aerate, aerobics, aerodynamics, aeronautics
ast/astro	Greek	star	asterisk, asteroid, astrology, astronaut, astronomer, astronomy, astrophysics, disaster
bio	Greek	life, living	antibiotic, autobiography, biochemistry, biography, biography, biologist, biology, biometrics, bionic, biopsy, biotic
geo	Greek	earth	geography
phon	Greek	sound	microphone, phoneme, phoneme, phonics, phonograph, symphony, telephone
meter	Greek	measure	barometer, centimeter, diameter thermometer
act/ig(u)/ag	Latin	do	action, actor, agile, ambiguous, enact, react, transact
agr	Latin	field, land	agrarian, agribusiness, agriculture, agronomy, peregrinator
alter	Latin	other	alter, altercation, alternate, alternative
anim	Latin	life, spirit	animal, animate, animosity, inanimate
ann,enn	Latin	year	annual, anniversary, annuity, biennial, millennium
aqua	Latin	water	aquamarine, aquarium, aquatic, aqueous, aquifer
aud	Latin	hear	audible, audience, audiovisual, audition, auditorium
dic/dict	Latin	say, speak, tell	benediction, contradict, dictate, dictation, dictator, dictatorial, diction, dictionary, edict, indicate, predict, verdict
min	Latin	little, small	mini, miniature, minimal, minimize, minimum, minority, minute
ped	Latin	foot	pedal, peddle, peddler, pedestal, pedestrian, pedicure, pedometer
port	Latin	carry	deport, export, import, portable, portage, portend, porter, portfolio, portly, report, support, transport, transportation

**Table 4-1 Frequently occurring Greek roots (continued)**

Base	Origin	Meaning	Examples
mit/mis	Latin	send, put	dismiss, emissary, emission, emit, intermittent, message, missile, mission, permit, promise, remit, submission, submit, transmission, transmit
scrib/script	Latin	write	describe, inscribe, inscription, manuscript, prescribe, prescription, scribble, scribe, script, scripture, transcript
spec/spect/spi	Latin	see, look	circumspect, despise, inspect, inspection, inspector, perspective, prospect, respect, retrospect, spectacle, spectator, suspect
struct	Latin	build, form	construct, construction, construe, destruct, destruction, infrastructure, instruct, instruction, instrument, instrumental, reconstruction, structure

### The Most Useful Common Roots

Further, Diamond & Gutlohn (2006), Ebbers (2005), Fry & Kress (2012), Fry & Kress (2012), McWhorter & Sember (2009), Stahl & Kapinus (2001) and Stahl & Shield (1992) list the most useful roots in understanding unknown words as follows:

**Table 4-2 The most useful common roots**

Root	Origin	Meaning	Examples
auto	Greek	self	automobile, autograph, autonomy, autocrat, autobiography, automobile
cycl	Greek	circle, ring	cyclone, cycle
gam/gamy	Greek	marriage, union	bigamist, monogamous, polygamy
geo	Greek	earth	geography, geology, geometry, geophysics
gram/graph	Greek	write, letter	autograph, autograph, biography, grammar, graphic, monogram, photograph, telegraph
photo	Greek	light	photograph, photosynthesis
scop	Greek	see	microscope, periscope
sym/syn	Greek	same, together	symbiosis, symmetry, symphony, syndrome, synonym, synthesis

**Table 4-2 The most useful common roots (continued)**

<b>Root</b>	<b>Origin</b>	<b>Meaning</b>	<b>Examples</b>
therm	Greek	heat	thermal, thermometer
ang	Latin	bend	angle, angular
aud/audit	Latin	hear	audio, audiovisual, audition, auditorium, inaudible, incredible
cap/cept	Latin	take, hold, catch	accept, capacious, capacity, captivate, captor, captured, conception, intercept, reception, receptive
cede/ceed	Latin	go	exceed, intercede, precede, proceed, recede, secede
cred	Latin	belief, faith	credentials, credentials, credit, credit, credulous, incredible
duc/duct	Latin	lead, bring, take	conduct, deduction, duct, induce
fac/fic	Latin	make, do	benefactor, factory, fictitious, manufacture
fid/fidel	Latin	believe, trust, faith	confide, fidelity, fiduciary, infidel
flect/flex	Latin	bend, curve, turn	deflect, flexible, flexion, reflection
gen/gene	Latin	origin, race, type	generation, generic, genre, homogeneous
ject	Latin	toss, throw	abject, adjective, conjecture, dejected, eject, inject, injection, interject, jettison, object, objective, project, projectile, projection, projector, reject, subject, subjective, trajectory
junct	Latin	join, unite	adjunct, conjunction, junction, juncture
leg/lex/lig	Latin	law	legal, legislature, legitimate
loc	Latin	place	allocate, location
man/manu/ mani	Latin	hand, make, do	manicure, manual, manufacture, manuscript
miger	Latin	move	immigrant, migratory
miss	Latin	send	dismiss, missionary
mob/mot/ mov	Latin	move	automobile, mobile, movement, remove
mot	Latin	move	motion, motor
pop	Latin	people	popular, population

**Table 4-2 The most useful common roots (continued)**

<b>Root</b>	<b>Origin</b>	<b>Meaning</b>	<b>Examples</b>
pel, puls	Latin	push, drive	compel, expulsion, impulse, propeller, repel
pos/pon	Latin	place, put	deposit, opponent, pose, position, retract, traction, tractor, transpose
rupt	Latin	break	bankrupt, disrupt, erupt, interrupt, rupture
sen/sent	Latin	feel	senseless, sensibility, sensitive, sensor, sensory, sentimental
sing	Latin	mark	signal, signature
tract	Latin	pull, draw	attract, attraction, contract, extract, subtract, traction
urb	Latin	city	suburb, urban
vac	Latin	empty	vacant, vacuum
ven/vene/ vent	Latin	come	convene, event, intervention, prevent
vers/vert	Latin	turn, twist	controversial, convert, divert, extrovert, introvert, inverse, invert, reverse, versatile
vid/view/vis	Latin	see, look	preview, revise, videodisc, visible, vision
volv	Latin	roll	revolution, revolver

### Important Roots to Know

The following roots chart provides a list of commonly taught Greek and Latin roots along with meanings and example words that will help students understand the meaning of unknown words. For example, the root *acro* means ‘high’ and the root *phobia* means ‘fear’ so *acrophobia* means ‘a fear of heights.’ (Callella, 2009; Newton et al., 2008; Dale, Glanze & O’Rourke, 1981)

**Table 4-3 Important Greek roots**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
acro	height, high, tip, end	acrobat, acronym, acrophobia, acropolis
anti	against, opposite	antibiotic, antibody, anticlimax, antipathy, antisepic, antisocial
anthr/anthropo	man, human being	anthropology, misanthrope, philanthropist
arch	chief	archbishop, archenemy, architect, hierarchy, monarch
arch/arche	primitive, ancient	archaeology, archaic, archive, archetype

<b>Table 4-3 Important Greek roots (continued)</b>		
<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
ast/astro	star	asterisk, asteroid, astrology, astronaut, astronomer, astronomy, astrophysics, disaster
athl/athlon	prize, contest	athlete, athletics, decathlon, pentathlon
auto	self	autobiography, autocracy, autograph automatic, autonomy
baro/baros	weight	barograph, barometer, baroscopic, isobar
biblio	book	Bible, bibliography
bronch	windpipe, throat	bronchial, bronchitis, bronchopneumonia, bronchotomy
chrom	color	achromatic, chromatic, chromatography, chromium, chromosphere
chron	time, chronicle	chronic, chronicle, chronograph, chronological, synchronize
cosm(o)	universe, world, order	cosmetic, cosmology, cosmonaut, cosmopolitan, cosmos, macrocosm, microcosm
cracy	type of government	aristocracy, autocracy, bureaucracy, democracy, technocracy, theocracy
crat	rule, member of a type of government	aristocrat, autocrat, autocratic, democrat, democratic, plutocrat, technocrat, theocrat
crypt	secret	crypt, cryptic, cryptogram, cryptography
cycl	circle, ring, wheel	bicycle, cycle, cyclic, cycling, encyclopedia, tricycle, unicycle
dem/demos	people	demagogue, democracy, democrat, demographer, demography, epidemic
derm/dermat	skin	dermatitis, dermatology, epidermis, hypodermic
dyn	power, strong	dynamic, dynamite, dynamo, dynasty
emia/hemia	blood	anemia, hemorrhage, hemostat, leukemia
erg	work	energy, erg, ergonomic, synergy
esth	feeling	anesthetic, anesthetist, esthete, esthetic
gam	marriage	bigamy, monogamy, polygamy
gen	birth, race	genealogy, generation, genius, genocide, progeny
geo	earth	geography, geologist, geology, geometry, geophysics, geopolitical

**Table 4-3 Important Greek roots (continued)**

Base	Meaning	Examples
gon	angle	diagonal, heptagon, hexagon, octagon, pentagon, polygon
ger/geront	elderly	geriatric, gerontology
gnos/gnost	read, know	agnostic, diagnose, diagnostic, prognosticate
gram	letter, written	diagram, grammar, hexagram, telegram
graph	write	autograph, graphic, photograph, polygraph, telegraph
gyn	woman	gynecologist, misogynist, monogyny, polygyny
heli	sun	heliocentric, heliograph, heliotrope, helium
(h)em/hemat	blood	anemia, hematology, hematoma
hemi/semi	half	hemi cranial, hemisphere, semiannual, semiconscious, semisweet
hepta	seven	heptagon, heptarch
hexa	six	hexagon, hexagram
homo	same	homogenizes, homograph, homonym, homophone
hor(o)	hour	horoscope
hydr/hydro/hydra	water	hydrant, hydrate, hydraulic, hydrogen, hydrologist, hydrometer, hydrophobia
hyper	over, too much, a lot	hyperactive, hyperactivity, hypercritical, hypersensitive, hyperspace
iatr/iatic/iatro	medical care	geriatrics, pediatrician, podiatry, psychiatry
kilo	one thousand	kilobyte, kilogram, kilometer, kiloton, kilowatt
kine/cine	movement	cinema, kinesthetic, kinetic
lith	stone	lithograph, monolith, Neolithic, Paleolithic
log	word	apology, dialogue, eulogy, prologue
lys	break down	analysis, catalyst, electrolysis, paralysis
mania	madness, insanity	bibliomania, kleptomania, mania, maniac, megalomania, monomania, pyromania
mega	big	megabyte, megahertz, megalopolis, megastar, megaton
mal	bad, wretched, evil	malcontent, malfeasance, malice, malicious, malign

<b>Table 4-3 Important Greek roots (continued)</b>		
<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
mech	machine	biomechanical, mechanic, mechanism, mechanistic, mechanize
meter	measure	centimeter, diameter, metric, odometer, speedometer, thermometer
micro	small	microbiology, microcosm, micrometer, microphone, microscope
mis	bad, badly, wrong, wrongly	misbehave, mislead, misnomer, misplace, mistake
mnem	memory	amnesia, amnesty, mnemonic, mnemosyne
mon/mono	one	monarch, monochrome, monotheist, monotone, monotonous
morph	shape	amorphous, anthropomorphic, metamorphosis
neo	new	neoclassic, neon, neonatal
non	not	nonfat, nonprofit, nonstop, nonverbal, nonviolent
ologist	one who studies	astrologist, biologist, geologist, hydrologist, physiologist
ology	the study of	astrology, biology, geology, hydrology, physiology
onym	name	acronym, antonym, pseudonym, synonym
opt	eye, sight	optic, optical, optician, optometrist
ortho	straight, right	orthodontist, orthodox, orthopedist
oss/osteo	bone	ossify, osteomyelitis, osteopath, osteotomy
pan	all, every	pandemic, pandemonium, panorama, pantheism, pantheon
path	feeling, suffer, disease	apathy, empathy, pathology, psychopath, sympathy
ped	child, teach	encyclopedia, pedagogical, pedantic, pediatrician
penta	five	pentagon, pentagram, pentameter, pentane, pentathlon
petr	rock	petrification, petrify, petrol, petroleum
phag	eat	anthropophagi, dysphagia, esophagus, sarcophagus
phil	love	philanthropist, philharmonic, philosophy

**Table 4-3 Important Greek roots (continued)**

Base	Meaning	Examples
phob/phobia	fear	ablutophobia, acrophobia, agoraphobia, anthropophobia, aquaphobia, claustrophobia, dementophobia, herpetophobia, hydrophobia, satanophobia, phonophobia, psychphobia, pyrophobia, xenophobia
phon/phono	sound	microphone, phoneme, phonics, phonograph, symphony, telephone
phor	to carry	dysphonia, euphoria, metaphor, semaphore
photo	light	photoelectric, photogenic, photograph, photosynthesis, proton, telephoto
phys	nature, body, natural, science	geophysics, metaphysical, physical, physician, physics, physiology, physique
pne	air, lung, breathe	apnea, pneumatic, pneumonia
pod/ped	foot	bipodal, pedal, pedestrian, podiatrist, podium, tripod
poli/polit	city	acropolis, cosmopolitan, metropolis, police, political
psych	mind, soul	psyche, psychiatrist, psychiatry, psychic, psychology, psychopath
pter	wing, feather	helicopter, lepidopterist, pterodactyl, pterosaur
pyro	fire	pyroclastic, pyrolysis, pyromania, pyrotechnician, pyrotechnics
saur	lizard	brontosaurus, dinosaur, sauropod, tyrannosaurus
scop/scope	see, watch	microscope, periscope, scope, stethoscope, telescope
soph	wise	philosopher, sophisticated, sophistry, sophomore
syllaba	take, together	syllabification, syllabify, syllable, syllabus
techn	art, skill, fine craft	technical, technician, technique
tele	distance	telekinesis, telephone, teleport, telescope, television
thanas/thanat/ thanatos	death	euthanasia, thanatologist, thanatophobia, thanatopsis, thannatos
the/theo	god/religion	atheism, monotheism, pantheon, polytheism, theocracy, theocrat, theologian, theology

**Table 4-3 Important Greek roots (continued)**

Base	Meaning	Examples
therm/thermo	heat	hypothermic, thermal, thermometer, thermonuclear, thermos, thermostat
tom/tm	cut	anatomy, appendectomy, atom, dichotomy, entomology, neurectomy, tonsillectomy
topos	place, spot	topical, topography, topology, utopia
tox	poison	antitoxin, intoxication, toxic, toxin
tri	three	triangle, tricycle, trident, trilogy, tripod
trop	turn	entropy, trope, tropics
zo(o)	animal	protozoan, spermatozoa, zodiac, zoo, zoologist

**Table 4-4 Important Latin roots**

Base	Meaning	Examples
(a)llel	one another	parallel
act	do	action, actor, enact, react, transact
agri	field	agrarian, agriculture, agronomy
alt	high	altimeter, altitude, alto
alter	other	altercation, alternate, alternative
ambul/amble	walk, go	amble, ambulance, preamble
ambi/amphi	both, around	ambidextrous, amphibian
am/amo/ami/am at/amor	love, friend	amateur, amiable, amity, amorous
ang	bend	angle, angular, quadrangle, triangle
anim	life, spirit	animal, animate, animosity, inanimate
ann/enn/anus	year	anniversary, annual, annuity, bicentennial, biennial, perennial
arm	weapon	armada, armistice, armor, armory
apt/ept	suitable	adept, apt, aptitude, inept
aqua	water	aquamarine, aquarium, aquatic, aqueduct
art	skill	artifact, artificial, artisan, artist
aud/audi/audit	hear	audible, audience, audiovisual, auditorium
avi	bird	aviary, aviator, avicide, aviculture
bi	two	bicep, bicycle, bifocal, binary, binoculars
belli	war	antebellum, bellicose, belligerent, rebellion
ben/bene/bon	good, well	benediction, beneficial, beneficiary, benefit, benevolent, bonanza

**Table 4-4 Important Latin roots (continued)**

Base	Meaning	Examples
brev	short	abbreviate, abbreviation, breviary, brevity
cam	field	camp, campaign, campus
camera	vault, chamber	bicameral, camera, chamber, unicameral
cand	glow, white, pure	candelabra, candidate, candle, incandescent
cant	song	canticle, canto, cantor, incantation
cap	head	cap, capital, captain, decapitate
caps	case	capsule, capsulize, encapsulate, encapsulation
capt	take, receive	captivate, captivity, captor, capture
carn	flesh	carnal, carnivorous, incarnation
cav	hollow	cave, cavern, concave, excavate
cent	one hundred	cent, centimeter, centurion, percent, percentile
cede/ceed/cess	go, yield	access, cessation, concede, exceed, proceed, process, recess, succeed
ceive/cept	take, receive	accept, conception, receive, reception
centr	center	central, centrifugal, eccentric, egocentric
cert	sure	ascertain, certain, certificate, certify
cens	judge	censor, censorship, censure, census
choreia/chorus	dancing	choreography, chorister, chorus, Terpsichore
cide/cise	cut, kill	excise, fratricide, genocide, herbicide, incision, insecticide, scissors, suicide
cip	take, receive	incipient, participate, recipe, recipient
circ	around, circle	circle, circuit, circulation, circumvent, circus
civ	citizen	civic, civil, civility, civilization
claim/clam/ clamat	shout	acclaim, clamor, declaim, exclaim, exclamatory, proclaim, proclamation
clar	clear	clarity, declaration, declarative, declare
class	classic, class, group	classic, classical, classify, neoclassic
clin	lean, lie	declination, decline, inclination, incline, recline
clud	shut, close	conclude, exclude, include, preclude, seclude
clus/clos	shut, close	conclusion, conclusive, enclose, exclusive, inclusion, seclusion

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
cogn	know	cognition, cognitive, cognizant, incognito, recognize
colo/cult	cultivate, settle	agriculture, colony, cultivate, culture
commun	common	commune, communicable, communicate, communism, community
con/co/col/com	with, together, joined	collide, common, company, connect, cooperate
corn (u)	horn	bicorn, cornet, cornucopia, cornucopia
contra/contro	against, opposite, different	contradict, contraindicate, contrarian, contrary, contrast
corp	body	corporation, corps, corpse, corpulent, corpus, corpuscle
cred/credit	believe	accredited, credentials, credibility, credible, credit, creditor, credo, credulous, discredit, incredible
crim	judge, accuse	crime, criminal, discriminate, incriminate
crit	separate, judge	criterion, critic, critical, criticize
cub/cumb	lie, recline	incubate, incumbency, incumbent, succumb
culp	fault, blame	culpable, culprit, exculpate, inculpate
cum	pile up, increase	accumulate, cumulate, cumulative, cumulus
cur	care	accurate, curable, curator, cure, manicure
cur	run, go	concourse, concur, courier, course, current, cursive, excursion, occur
dat	give	antedate, data, mandate, postdate
deb	owe	debit, debt, debtor, indebted
decor	proper, fitting	decor, decoration, decorum, indecorous
dei/divin	god	deiform, deify, deism, deity, divinity
dent	tooth	dental, dentist, dentures, dentifrice, indent, trident
dic/dict	say, speak, tell, speech	contradict, dictate, dictation, dictator, diction, predict, verdict
dign	worth	condign, dignify, dignitary, dignity
div	divide, separate	divide, dividend, divisor, divorce
do/don/donat	give	antidote, donate, donation, done, donor, dosage, pardon
doc	teach	doctor, doctrine, document, indoctrinate

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
dorm	sleep	dormancy, dormant, dormer, dormitory
dur	hard	durable, duress, durable, endure
duc/duct	lead	abduct, conduct, educate, induct, seduce
ego	I	ego, egocentric, egomania, egotistic
ent/essent/ essence	be	absent, present, essential
equ/equi	equal, even, just	equality, equation, equator, inequity
err	wander	err, erratic, erroneous, error
fac	make, do	benefactor, facsimile, factory
fal/fall/fals/fail/ fault	false, mistake, fall	default, fallacy, fallible, false, falsify, infallible
femina	woman	effeminate, female, feminine, feminist
fend/fens	strike	defensive, offends
fer/fens	bear, carry	collate, confer, ferry, infer, refer, transfer
fess	speak	confess, confession
fic	make, do	beneficial, efficient, proficient, sufficient
fid	faith	bona fide, confide, confidence, fidelity
fig	form	configuration, disfigure, figure
filii	son, daughter	affiliate, affiliation, filial, filicide
fin/finit	end, limit, term	final, finale, finite, infinite
firm	steady	affirm, confirm, confirmation, infirm
fix	fasten	affix, fixture, prefix, suffix
flam	blaze	flamboyant, flame, flammable, inflammable
flect	bend	deflect, inflate, inflection, reflect, reflection
flex	bend	circumflex, flex, flexible, reflex
flor	flower	efflorescent, flora, floral, florist
flu	flow	affluent, fluid, fluent, influx
foc	focus	bifocal, focaccia, focal, foci, focus
fol	leaf	defoliate, foliage, folio, portfolio
forc/fort	power, strength, strong	enforce, forceful, forcible, fortify
form	shape, form	formal, formation, reform, transform, uniform
fort	strong	fortification, fortify, fortitude
found/fund/fus	pour, melt	confuse, foundry, refund

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
fract/frag	break	fraction, fracture, fragile, fragment
frat/frater	brother	fraternal, fraternity, fraternize, fratricide
fric	rub	dentifrice, friction
fru	enjoy	fructify, fruit, fruitful, fruition
fug	flee	centrifugal, fugitive, refuge, refugee
funct/function	perform	defunct, dysfunctional, function, functional, malfunction
fum	smoke, vapor	fume, fumigate, fumigation
fus	pour	diffuse, fusion, profuse, transfusion
grad/gress	step, stage, degree, rank	congress, degrade, grade, gradual, graduation, retrograde
gran	grain	grain, granary, grange, granulated
grat	pleasing, thank	congratulate, gratis, gratitude, grateful, ungrateful
greg	gather, herd	congregation, gregarious, segregation
hab/hib	hold, dwell, keep	exhibit, habit, habitat, inhabit, prohibit
hal(e)	breathe	exhale, halitosis, inhale
her/hes	stick, cling	adhesive, coherent
horr	frighten	horrify, horror
hosp/host	host	hospital, hospitality, hostess
hum	earth, soil	exhume, humidity, humiliate, humus, inhum
i/it	go	exit, initiate, obit, transient
ident	same	identical, identification, identify, identity
imag	likeness	image, imagery, imaginative, imagine
imperi	command	emperor, empire, imperative, imperious
init	beginning	initial, initiate, initiative
integ	whole	integer, integral, integrate, integrity
inter	among, between	intercept, intercollegiate, internet, interrupt, interval
ir	anger	irascible, irate, ire, irritate
ject	throw	eject, inject, project, reject
jocus	joke	jocose, jocular, jocund, joke

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
journ	daily	journal, journalism, journey, sojourn
jud/jur/just	law, right	judge, judicial, judicious, jurisdiction, jury, just, justice, justify
junct	join	adjunct, conjunction, juncture, junction
lab/labor	work	collaborate, elaborate, labor, laboratory
laps	slip	collapse, elapse, lapse, relapse
lat (l)	carry	collate, relate, translate
lat/later	side	bilateral, lateral, quadrilateral, unilateral
lav	wash	lavatory
lect	gather, choose	collect, elect, electoral, select
leo	lion	leonine, leopard
lect/leg/lig	read	delegate, eligible, lectern, legible, legitimate
lev	raise, lift	elevator, levee, lever, leverage
liber	free	liberal, liberate, libertarian, liberty
libr	book	librarian, library, librettist, libretto
lingu	language, tongue	bilingual, lingual, linguist, linguistic
liter/litera	letter	illiterate, literal, literary, literature
loc/locat	place	allocate, dislocate, localize, locate, location
locut/loqu	speak, talk	circumlocution, colloquial, elocution, eloquent, locution, loquacious
lu	wash	ablution, antediluvian, deluge, dilute
luc/lumin	light	elucidate, lucid, Lucifer, luminous, translucent
lud/lus	play, trick, mock	elude, illusion, illusive, interlude, ludicrous, prelude
lum/lumin	light, shine, source	illuminate, illumination, lumen, luminary, luminescent, luminous
luna	moon	cislunar, lunar, lunatic, translunar
lust	shine	illustrate, illustrious, lackluster, luster
m(eridium)	noon, midday	ante meridiem (A.M.), post meridiem (P.M.)
magn	big, great	magnanimous, magnate, magnificent, magnify, magnitude
mal(e)	bad, wretched, evil	malcontent, malfeasance, malice, malicious, malign
man/main	stay, remain	permanent, remain

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
man	hand	manipulate, manual, manufacture, manuscript
mand(l)	order	command, demand, mandate, mandatory
mar/mare	sea	marine, mariner, maritime, submarine
mater/metri	mother	maternal, maternity, matrimony, matron
matr (l)	mother	matricide, matrimony, matrix, matron
max (l)	greatest	maximize, maximum
medi/midi	middle	median, mediate, medieval, mediocre, medium
migr	wander, moving	emigrate, immigrant, immigrate, migrant, migrate
med/medi	middle	mediate, medieval, mediocre, medium
mem/memoria	mindful of, memory	commemorate, medium, memorandum, memorial, memorial, memorize, memory, remember
ment	mind	demented, memento, mental, mentality, mention
merge/mers	dip	emerge, immerse, merge, merger, submerge, submerse
migr	change, move	emigrate, immigrant, migrate, migratory
mil	soldier	militant, military, militate, militia
mim	same, imitate	mime, mimeograph, mimic, pantomime
min	small, less	mini, minimize, minor, minus, minute
minist	serve	administer, administration, minister
miss/mit	send	admit, dismiss, missile, mission, remiss, remit, submit, transmit
mob/mobile	move	automobile, mobile, mobility, mobilize
mon	advise, warn	admonish, admonition, monitor, premonition
mor	custom	immoral, moral, morality, morals, mores
mor/mort	death	immortal, moribund, mortal, mortician, mortuary
mot	move	demote, motion, motor, promote
mov	move	movement, remove, unmoved
multi	many	multiple, multiples, multiplicity, multiply, multitude
mut	change, interchange	commute, mutation, mutual
narr	tell	narrate, narrative, narrator

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
nat/natur/nasc	born, give birth, produce	innate, nation, native, nativity
nav/navig	ship, sail	circumnavigate, naval, navigate, navy
neg (l)	no	negation, negative, renegade
noc/nox	harm	innocent, noxious
nomen/nomin	name	denomination, nomenclature, nominate, nominative
not	mark	denote, notable, notation, notice
nov	new	innovate, novel, novelty, novice
nun/noun	declare	announce, denounce, pronounce
numer	number	enumerate, numeral, numerator, numerous
ocu/ocul	eye	binocular, monocular, ocular, oculist
omni	all	omnipotent, omnipresent, omniscient, omnivore, omnivorous
orare	speak, pray	oral, oracle, orator, oratory
ord	row	extraordinary, order, ordinary
orig	beginning	origin, original, originate
ov	egg	oval, ovary, oviparous, ovum
pac	peace	pacemaker, pacify
par	give birth	parent, parentage, viviparous
par	equal, compare	comparable, compare, parable, parity
par/part	appearance, seem	apparition, disappear
past/pastor	shepherd	pastor, pastoral, pasture
pater (l)	father	paternal, paternity, patriarch
ped (l)	foot	biped, pedal, pedestal, pedestrian
pen/pun	punishment	penal, penalize, penitentiary, punitive
pend/pens	hang	append, appendix, pendant, pendulum, suspend
pens	weigh	compensate, pension, pensive
plac	calm, please	complacent, placate, placebo, placid
ple/plex/ply	fold, multiply	complex, duplex, imply, multiple, perplex, Plexiglas
plic	fold	complicated, duplicate, multiplication
plur/plus	more	plural, pluralism, plurality
pon	place	components, exponent, opponent, postpone, proponent
pop	people	pop, populace, popular, population
port	carry	import, portable, porter, transport

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
porta	gate	port, portal, seaport
pos	place	apposition, compose, composite, deposit, position, positive
poss/pot	power	impossible, potentate
pre	before	predicate, predict, prenuptial, prescription previous
preci	price, value	precious, semiprecious
pug	fight	pugilist, pugnacious, repugnant
pul	urge	compulsion, compulsory, expulsion, repulse
puls	drive, push	compulsory, expulsion, propulsion, repulse
put	think	computer, deputy, disrepute, reputation
quad	four	quad, quadrangle, quadrilateral, quadruped, quadruple
quer/quir(l)	ask, seek	inquiry, query
ques (l)	ask, seek	inquest, quest, question, request
quint	five	quinary, quintuplets
rad	ray, spoke	radio, radiology, radium, radius
ras/rase	scrape	abrasive, erase, rasher, rasp, razor
rect	straight, right	correct, direction, erect, rectangle, rectify
referre	carry back	refer, reference, referendum, referent
reg	guide, rule, straight	incorrigible, interregnum, regal, regent, regime, regular, regulate, reign
retro	back	retroactive, retrograde
rid/ris	laugh	deride, derisive, ridiculous, ridicule
rod/ros	gnaw	corrode, erode, erosion, rodent
rogare	ask, request	abrogate, interrogate, interrogative, prerogative, rogation
rota	wheel, round	rotary, rotate, rotor, rotunda
rupt	break	abrupt, bankrupt, erupt, interrupt, rupture
sacr/sanct(u)	holy, sacred	sacrament, sacred, sacrifice, sacrilege, sanctification, sanctify, sanctuary
san	health, sound	insanity, sane, sanitary, sanitarium
sat/satis	enough, satisfy	insatiable, satiety, saturate, satisfy
scend/scens	climb	ascend, descend, descendent, transcend
schole	leisure, school	school, scholar, scholastic, scholarship
sci	know	science, conscience, conscious, scientific

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
scribe/script	write	describe, inscribe, manuscript, prescribe, scribe
sec/sect	cut, slice	dissect, intersect, sect, section
secut/sequ	follow	prosecute, sequel
sed/sid/sess	settle, sit	preside, reside, sedative, sediment, sedentary, sedate, session
semi	one half	semicircle, semiconductor
semin	seed	disseminate, seminary, seminarian, seminar
sen	old	senator, senior, seniority, senile
sens/sent	feel, think	assent, consent, dissent, sensation, sense, sensitive, sensible, sensory, sentiment
seps/sept	decay, infection,	antiseptic, aseptic, sepsis, septic, septicemia
sept(em), sept(a)	seven	septet, September
sequ	follow	consequently, sequel, sequence, subsequent
serv/servat	save, keep, serve	conserve, conservation, preserve, preservation, reserve, reservoir, reservation, serve, servant, service, servile
servus	slave, server	service, servitude, subservient, servile
sex	six	sextet, sextette
sexus	division, sex	bisexual, sex, sexual, sexism
sign/signi	mark, sign	insignia, signature, signal, significant, signify
sim/simil/simul	like, same	similar, simultaneous, simulate, simile
sist	stand	assist, consist, resist, subsist
sit	food, feed	parasite, parasitism
sol	alone, only	desolate, solo, solitary, soliloquy
solidus	solid	consolidate, solid, solidarity, solidify
solv/solo/solut	free, loosen	absolve, dissolve, resolve, solve, solvent
somn	sleep	insomnia, insomniac, somnambulist, somniloquist, somnolent
son/sound	sound	resonate, resound, sonar, sonata, sonnet, sonorous, subsonic, unison

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
sorb	soak	absorb, sorbent
spec/spic/spect	see, look	conspicuous, inspect, prospect, respect, specimen, spectacle, spectator, suspect
spher	ball, sphere	atmosphere, hemisphere, spherical, stratosphere
spir	breathe	expire, inspire, perspire, respiration, spirit
spond/spons	answer	correspondent, respond, respondent, responsive
sta/stanc/stat	stand	circumstance, stagnant, standard, static, station, stationary, statue, status
strain/strict/string	tie, bine, squeeze, draw tight	constrict, restrain, restrict, restrict, strict, stricture, stringent
stell	star	constellation, stellar
stimu	goad	stimulant, stimulate, stimulus
stru/struct	build	construct, destruction, instruct, structure
sub	under, lower than, inferior	sublime, submarine, suburbs, subway, subzero
sum	highest	sum, summary, summit, summons
surg	rise	insurgent, resurgent, surge
surr	rise	insurrection, resurrect, resurrection
tabl/tabula	board, tablet	entablature, table, tablet, tabular
tact/tang/ting/tig	touch	contact, contiguous, intact, intangible, tact, tactile, tangent, tangible
tact/tax	to arrange, order	syntactical, syntax, tactics, taxidermist
taph	grave, tomb	cenotaph, epitaph
tain/ten	hold	attain, contain, detain, retain, tenacious
tem/tempo	time	contemporary, extemporaneous, tempo, temporal, temporary
ten/tin/tent/tain	hold	contents, continent, retain, retentive, sustenance, tenacious, tenant, tenement, tenet, tenure
tend/tens/tent/tenu	stretch, thin	attend, extend, intend, intense, ostensible, tendency, tendon, tense, tensile, tension, tent
term	end	determine, exterminate, terminal
ter/terr	land, ground, earth	inter, terrace, terrain, terrestrial, territory
terrere	to frighten	terrible, terrify, terror, terrorist
test/testare	affirm, to witness	intestate, testament, testify, testimony

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
tex	weave	context, text, textile, texture
theater/theatr	theater, watch	amphitheater, theatergoer, theatrical
thes/thet	put, place	synthesis, synthetic, thesis
tort	twist, turn	contort, distort, extort, retort, tort, torture
trac/tract/treat	pull, drag, draw	attract, extract, subtract, traction, tractor
trans	across, beyond, through	transcribe, translate, transmit, transparent, transport
trib (l)	give	attribute, contribute, tributary, tribute
trud	thrush	extrude, intrude, intruder, obtrude, protrude
trus (l)	push	intrusive, obtrusive
tuitus	watch, over	tuition, tutelage, tutor, tutorial
turb (l)	confusion, turmoil, whirling	disturb, perturb, turbid, turbine, turbulent
ultimus	last	antepenult, penult, ultimate, ultimatum
umber/umbra	shade, shadow	adumbrate, penumbra, umbra, umbrella
unda	wave	abundant, inundate, redundant, undulate
uni	one	unicorn, unicycle, unilateral, unity, universe
urb	city	suburb, suburban, urban, urbane
vac/vaca/vacu	empty, hollow	evacuate, vacancy, vacant, vacation, vacuum
vad/vas	go	evade, evasive, invade, pervade
vag	wander	extravagant, vagabond, vagary, vagrant, vague
val	be strong, be healthy, worth	convalescence, equivalent, invalid, valid, valor, value
van	front, forward	avant-garde, van, vanguard, vantage point
vapor	steam	evaporate, vapor, vaporizer, vaporous
var/vari	different	invariable, variant, variegated, variety, vary
ven/vent	come	advent, adventure, convene, convent, convention, event, invent, venue
ven	sale	caveat vendor, venal, vend, vendor
ven	vein	intravenous, vein, venous, venue
ver	truth, true	veracity, verdict, verification, verify
ver/vers/vert	turn, change	adverse, advertise, convert, introvert, reverse, versatile

**Table 4-4 Important Latin roots (continued)**

<b>Base</b>	<b>Meaning</b>	<b>Examples</b>
ver/verer	fear, awe	irreverent, revere, reverence, reverend
verb	word	adverb, proverb, verb, verbal, verbally, verbatim, verbid, verbose
vesper	evening	Hesperus, Vesper, vespers, vespertilionid
vest	clothing	divert, investiture, vest, vestment
veter	old, experienced	vet, veteran, veterinarian, veterinary
vict	conquer	conviction, victim, victory
vid/vis	see	evidence, provide, providence, supervision, video, visible, vision, visit, visual
vit/viv	alive, live, life,	revive, survive, vital, vitality, vivacious, vivid, vivisection
vinc	conquer	convince, invincible
via	way, road	deviate, impervious, obviate, trivial, viaduct, voyage
voc/voke/voice	voice, call, sound	advocate, convocation, evoke, invoice, revoke, vocabulary, vocal
void	empty	avoid, devoid, void, voided
vol	wish, will	benevolent, involuntary, malevolent, volition, voluntary, volunteer
volv/volut	roll, turn	convolution, devolve, evolve, involve, revolution, revolve, revolver, volume
vor	eat, devour	carnivorous, devour, herbivorous
vulp	fox	vulpine, vulpecula

### The ‘measure’ Root

The root *meter* meaning ‘measure’ appears in many words which can be divided into many fields as in the following lists: (Dale, Glanze & O’Rourke, 1982)

**Table 4-5 The ‘measure’ root**

<b>Field/Discipline</b>	<b>Examples and meaning</b>	
Electricity	ammeter	<ul style="list-style-type: none"> <li>• a device that measures electric voltage</li> </ul>
	galvanometer	<ul style="list-style-type: none"> <li>• a device that measures the strength of an electric current</li> </ul>

**Table 4-5 The ‘measure’ root (continued)**

<b>Field/Discipline</b>	<b>Examples and meaning</b>	
	ohmmeter	<ul style="list-style-type: none"> <li>• a device that measures electrical resistance</li> </ul>
	pedometer	<ul style="list-style-type: none"> <li>• a device that measures the distance in walking with</li> </ul>
	thermometer	<ul style="list-style-type: none"> <li>• a device that measures the amount of heat</li> </ul>
	voltmeter	<ul style="list-style-type: none"> <li>• a device that measures in amperes</li> </ul>
	wavemeter	<ul style="list-style-type: none"> <li>• a device that measures the length of electromagnetic waves</li> </ul>
Human body or physical characteristics and health	acoumeter	<ul style="list-style-type: none"> <li>• an instrument for measuring the acuteness of the sense of hearing</li> </ul>
	anthropometry	<ul style="list-style-type: none"> <li>• the science of measuring the human body</li> </ul>
	audiometer/acoumeter	<ul style="list-style-type: none"> <li>• the keenness of your hearing is measured</li> </ul>
	biometrics	<ul style="list-style-type: none"> <li>• a branch of biology that deals with measuring statistically how many years the average person will live</li> </ul>
	calorimeter	<ul style="list-style-type: none"> <li>• a device that measures the heat given off by, or present, in the body</li> </ul>
	cardio tachometer	<ul style="list-style-type: none"> <li>• a device that measures the rate of the heartbeat</li> </ul>
	craniometer	<ul style="list-style-type: none"> <li>• a device that measures the skulls</li> </ul>
	dosimeter	<ul style="list-style-type: none"> <li>• a device that measures the dose or amount of radiation to which someone is exposed</li> </ul>
	isometric	<ul style="list-style-type: none"> <li>• a method of drawing a shape with three dimensions using two dimensions</li> </ul>
	optometer/ophthalmic	<ul style="list-style-type: none"> <li>• a device that measures the power of the eyesight</li> </ul>
	pedometer	<ul style="list-style-type: none"> <li>• a device that measures how far someone has walked by counting the number of times the feet are raised and put down again</li> </ul>
	pulsometer	<ul style="list-style-type: none"> <li>• a device that measures the strength of the pulse</li> </ul>

**Table 4-5 The ‘measure’ root (continued)**

<b>Field/Discipline</b>	<b>Examples and meaning</b>	
	sphygmomanometer	<ul style="list-style-type: none"> <li>• a device that measures the blood pressure</li> </ul>
	thermometer	<ul style="list-style-type: none"> <li>• a device used for measuring temperature, especially of the air or in a person's body</li> </ul>
Mathematics	centimeter	<ul style="list-style-type: none"> <li>• a unit for measuring length</li> </ul>
	diameter	<ul style="list-style-type: none"> <li>• the distance across a circle</li> </ul>
	geometry	<ul style="list-style-type: none"> <li>• the study of the angles and shapes formed by the relationships of lines, surfaces, and solid objects in space</li> </ul>
	kilometer	<ul style="list-style-type: none"> <li>• a unit for measuring distance</li> </ul>
	meter	<ul style="list-style-type: none"> <li>• a device that measures the level of something</li> </ul>
	metric	<ul style="list-style-type: none"> <li>• using or connected with the metric system of weights and measures</li> </ul>
	metricate	<ul style="list-style-type: none"> <li>• to change or adapt to a metric system of measurement</li> </ul>
	millimeter	<ul style="list-style-type: none"> <li>• a unit of measurement of length equal to 0.001 meter</li> </ul>
	perimeter	<ul style="list-style-type: none"> <li>• the whole length of the border around an area or shape</li> </ul>
	telemeter	<ul style="list-style-type: none"> <li>• a device used to measure distances to remote objects</li> </ul>
	telemetry	<ul style="list-style-type: none"> <li>• the science or process of collecting information about objects that are far away and sending the information somewhere electronically</li> </ul>
	trigonometry	<ul style="list-style-type: none"> <li>• a type of mathematics that deals with the relationship between the angles and sides of triangles</li> </ul>
Mechanics	macrometer	<ul style="list-style-type: none"> <li>• an instrument for measuring the size and distance of distant objects</li> </ul>
	micrometer	<ul style="list-style-type: none"> <li>• a device used for making very exact measurements or for measuring very small things</li> </ul>
	odometer	<ul style="list-style-type: none"> <li>• a device in a vehicle that measures and shows the distance it travels</li> </ul>

**Table 4-5 The ‘measure’ root (continued)**

<b>Field/Discipline</b>	<b>Examples and meaning</b>	
Poetry, fine arts and music	speedometer	<ul style="list-style-type: none"> <li>• a device in a vehicle that shows how fast the vehicle is moving</li> </ul>
	tachometer	<ul style="list-style-type: none"> <li>• a device for measuring the rate at which something turns</li> </ul>
	asymmetrical	<ul style="list-style-type: none"> <li>• having two sides that are different in shape</li> </ul>
	diameter	<ul style="list-style-type: none"> <li>• a straight line from one side of a circle to the other side, passing through the centre of the circle, or the length of this line</li> </ul>
	hexameter	<ul style="list-style-type: none"> <li>• a line of poetry with six main beats</li> </ul>
	metrical	<ul style="list-style-type: none"> <li>• written in the form of poetry, with a pattern of strong and weak beats</li> </ul>
	metrician	<ul style="list-style-type: none"> <li>• a composer of verses</li> </ul>
	metrist	<ul style="list-style-type: none"> <li>• a person skilled in metrical composition</li> </ul>
	metronome	<ul style="list-style-type: none"> <li>• a piece of equipment that makes a regular repeated sound like a clock, showing the speed at which music should be played</li> </ul>
	octameter	<ul style="list-style-type: none"> <li>• a line of verse consisting of eight metrical feet</li> </ul>
	pentameter	<ul style="list-style-type: none"> <li>• a line of verse consisting of five metrical feet, or (in Greek and Latin verse) of two halves each of two feet and a long syllable</li> </ul>
Science	symmetry	<ul style="list-style-type: none"> <li>• the quality of having parts that match each other, especially in a way that is attractive, or similarity of shape or contents</li> </ul>
	tetrameter	<ul style="list-style-type: none"> <li>• a verse of four measures</li> </ul>
	altimeter	<ul style="list-style-type: none"> <li>• a device that measures altitude</li> </ul>
	anemometer	<ul style="list-style-type: none"> <li>• a device that measures wind speed</li> </ul>
	barometer	<ul style="list-style-type: none"> <li>• a device that measures air pressure</li> </ul>
	bathometer	<ul style="list-style-type: none"> <li>• a device that measures the depth of water</li> </ul>

**Table 4-5 The ‘measure’ root (continued)**

<b>Field/Discipline</b>	<b>Examples and meaning</b>	
	colorimeter	<ul style="list-style-type: none"> <li>• a device that measures the shade or intensity of a color</li> </ul>
	magnetometer	<ul style="list-style-type: none"> <li>• a device that measures magnetic fields</li> </ul>
	photometer	<ul style="list-style-type: none"> <li>• a device that measures the light intensity or light meter</li> </ul>
	spectrometer	<ul style="list-style-type: none"> <li>• a device that measures the wave length of colors in the spectrum</li> </ul>

## Summary

The examples listed above will provide students with a useful reference in using Greek and Latin roots. These examples are designed to enhance knowledge of vocabulary and build communication skills in English. The more they learn the meaning and uses of roots, prefixes, and suffixes, the better they can apply them in their use of the English language. The list of frequently occurring roots, as shown in the examples above (Tables 4-1 to 4-5) provides students with a vast knowledge and understanding on how root words are used in day-to-day oral and written English communication.

## Exercises

### **Exercise 4-1: Greek and Latin roots**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

#### **Column A**

1. \_\_\_\_ phone
2. \_\_\_\_ ped
3. \_\_\_\_ dic/dict
4. \_\_\_\_ ast/astro
5. \_\_\_\_ port
6. \_\_\_\_ struct
7. \_\_\_\_ alter
8. \_\_\_\_ aqua
9. \_\_\_\_ act
10. \_\_\_\_ bio

#### **Column B**

- a. star
- b. other
- c. life, living
- d. sound
- e. do
- f. water
- g. say, speak, tell
- h. foot
- i. carry
- j. build, form

### **Exercise 4-2: Greek and Latin roots**

**Directions:** Write one word with its meaning from the root provided.

#### **Root**

1. ast/astro
2. alter
3. bio
4. phone
5. act
6. aqua
7. dic/dict
8. ped
9. port
10. struct

#### **New word**

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### **Exercise 4-3: Greek and Latin roots**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*Action / alternative / aquatic / astronomer / biotic / construction / dictation / pedestrian / portfolio / phonics*

1. Road \_\_\_\_\_ is the process or method of building or making a road.

2. A \_\_\_\_\_ can be defined as a thin flat case used for carrying documents, drawings, etc.
3. \_\_\_\_\_ can be defined as the process of doing something in order to make something happen.
4. To take \_\_\_\_\_ is the act of speaking or reading so that somebody can write down the words.
5. If you use an \_\_\_\_\_, it means that you can choose to do or have two or more possibilities.
6. \_\_\_\_\_ sports mean sport that are connected with water.
7. A scientist who studies the sun, moon, stars, planets, etc. is called an \_\_\_\_\_.
8. The \_\_\_\_\_ factor is something that relates to living things in the environment.
9. A \_\_\_\_\_ is a person walking in the street and not travelling in a vehicle.
10. A method of teaching people to read based on the sounds that letters represent is called \_\_\_\_\_.

#### **Exercise 4-4: The most useful common roots**

**Directions:** Fill in the blank with the root word that completes the sentence.

*cede / cred / cycl / gram / ject / mov / pos / sen / syn / view*

1. The root word that means ‘see’ or ‘look’ is: \_\_\_\_\_.
2. ‘Same’ or ‘together’ is the meaning of the root word: \_\_\_\_\_.
3. The root word that means ‘feel’ is \_\_\_\_\_.
4. The root word that means ‘belief’ or ‘faith’ is \_\_\_\_\_.
5. The root word that means ‘write’ or ‘letter’ is \_\_\_\_\_.
6. The root word that means ‘move’ is \_\_\_\_\_.
7. ‘Place’ or ‘put’ is the meaning of the root word: \_\_\_\_\_.
8. ‘Circle’ or ‘ring’ is the meaning of the root word: \_\_\_\_\_.
9. The root word that means ‘go’ is \_\_\_\_\_.
10. ‘Toss’ or ‘throw’ is the meaning of the root word: \_\_\_\_\_.

**Exercise 4-5: The most useful common roots**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

**Column A**

1. \_\_\_ intercede
2. \_\_\_ incredible
3. \_\_\_ sensor
4. \_\_\_ synthesis
5. \_\_\_ injection
6. \_\_\_ remove
7. \_\_\_ deposit
8. \_\_\_ preview
9. \_\_\_ biography
10. \_\_\_ cyclone

**Column B**

- a. an act of putting a drug or other substance into a person's body
- b. the story of a person's life written by someone else
- c. a storm in which the wind whirls around and around in a circle
- d. to go between
- e. a sum of money that is paid into a bank account
- f. beyond belief, implausible, not easy to believe
- g. device that responds to (senses) a physical event
- h. a combination of elements into a whole
- i. to take somebody or something away from a place
- j. an occasion at which you can see a film before it is shown to the general public

**Exercise 4-6: The most useful common roots**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*biography / cyclones / deposits / incredible / injections / interceded / preview / removed / sensor / synthesis*

1. The lawyer \_\_\_\_\_ in the argument between the divorced couple.
2. Our skin serves as a \_\_\_\_\_ for heat, cold, pressure, touch, and pain.
3. This building was a \_\_\_\_\_ of several architects' work.
4. My brother was treated with daily \_\_\_\_\_ of insulin.
5. She \_\_\_\_\_ her glasses and closed her eyes for a while.
6. \_\_\_\_\_ can be made at any branch of our bank.
7. A press \_\_\_\_\_ of a new movie is for journalists only not for public.
8. \_\_\_\_\_ do a great deal of damage in the Philippines.
9. He wrote a \_\_\_\_\_ of Bill Clinton.
10. A teacher hears some \_\_\_\_\_ explanations from his or her students about incomplete homework.

**Exercise 4-7: Important Greek roots****Directions:** Fill in the blank with a Greek root that completes the sentence.*anti / arch / cycl / emia / micro / onym / ortho / phobia / techn / tox*

1. ‘Fear’ is the meaning of the root word: \_\_\_\_\_.
2. The root word that means ‘poison’ is \_\_\_\_\_.
3. The root word that means ‘blood’ is \_\_\_\_\_.
4. The root word that means ‘chief’ is: \_\_\_\_\_.
5. ‘Circle’, ‘ring’, ‘wheel’ is the meaning of the root word: \_\_\_\_\_.
6. The root word that means ‘straight’, ‘right’ is \_\_\_\_\_.
7. ‘Against’ or ‘opposite’ is the meaning of the root word: \_\_\_\_\_.
8. ‘Art’, ‘skill’, ‘fine craft’ is the meaning of the root word: \_\_\_\_\_.
9. The root word that means ‘small’ is \_\_\_\_\_.
10. The root word that means ‘name’ is \_\_\_\_\_.

**Exercise 4-8: The most useful common roots****Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.**Column A**

1. \_\_\_ hydrophobia
2. \_\_\_ toxic
3. \_\_\_ technical
4. \_\_\_ monarch
5. \_\_\_ antipathy
6. \_\_\_ bicycle
7. \_\_\_ orthopedist
8. \_\_\_ leukemia
9. \_\_\_ pseudonym
10. \_\_\_ microbiology

**Column B**

- a. the sole ruler of a state
- b. a vehicle with two wheels propelled by foot pedals
- c. an excess of white blood cells
- d. the study of living things too small to see with the naked eye
- e. a false or assumed name
- f. a doctor who specializes in the treatment of bone ailments
- g. a feeling against, a strong dislike or aversion
- h. relating to the knowledge and methods of a particular subject or job
- i. containing poison, or caused by poisonous substances
- j. a great fear of water

**Exercise 4-9: The most useful common roots****Directions:** Use word from the list to complete the meanings of each sentence.

*antipathy / bicycle / hydrophobia / leukemia / microbiology / monarch/ orthopedists / pseudonym / technical / toxic*

1. Louis XVI, the \_\_\_\_\_ of France, was beheaded during the French Revolution.
2. Timmy goes to school by \_\_\_\_\_ every day.
3. \_\_\_\_\_ begins in a cell in the bone marrow.
4. Medical \_\_\_\_\_ deals with the roles that microbes have in human illness.
5. George Orwell was a \_\_\_\_\_; his real name was Eric Blair.
6. \_\_\_\_\_ are kept very busy straightening out broken limbs during the skiing season.
7. I feel her \_\_\_\_\_ towards me every time I'm in a room with her.
8. This instruction manual is written in \_\_\_\_\_ terms which are impossible to understand.
9. It is dangerous to let your kids play with \_\_\_\_\_ materials.
10. \_\_\_\_\_ can be a very dangerous and should be treated as soon as possible.

**Exercise 4-10: Important Latin roots****Directions:** Fill in the blank with a Latin root that completes the sentence.

*cept / cide / contra / dorm / form / ject / just / spect / vaca / ven*

1. The root word that means ‘shape’ or ‘form’ is \_\_\_\_\_.
2. ‘See’ or ‘look’ is the meaning of the root word: \_\_\_\_\_.
3. The root word that means ‘sleep’ is: \_\_\_\_\_.
4. The root word that means ‘empty’ or ‘hollow’ is \_\_\_\_\_.
5. The root word that means ‘cut’ or ‘kill’ is \_\_\_\_\_.
6. ‘Throw’ is the meaning of the root word: \_\_\_\_\_.
7. ‘Come’ is the meaning of the root word: \_\_\_\_\_.
8. The root word that means ‘law’ or ‘right’ is \_\_\_\_\_.
9. The root word that means ‘take’, ‘hold’, or ‘catch’ is \_\_\_\_\_.
10. ‘Against’, ‘opposite’, or ‘different’ is the meaning of the root word:  
\_\_\_\_\_.

**Exercise 4-11: The most useful common roots**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

**Column A**

1. \_\_\_ contradict
2. \_\_\_ transform
3. \_\_\_ accept
4. \_\_\_ insecticide
5. \_\_\_ dormitory
6. \_\_\_ reject
7. \_\_\_ justify
8. \_\_\_ inspect
9. \_\_\_ vacancy
10. \_\_\_ intravenous

**Column B**

- a. to look at something or someone carefully
- b. through, in, or into a vain
- c. to show that something is fair, to free from blame
- d. to throw back, to refuse to take, not to accept
- e. an opening, an unoccupied job or room
- f. a substance used to kill insects
- g. to agree to take something
- h. to say the opposite
- i. a large room for several people to sleep in
- j. to completely change the appearance, form, or character of something or someone

**Exercise 4-12: The most useful common roots**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*accept / contradicted / dormitory / insecticide / insomnia / intravenous/ justify / rejected / transformed / vacancies*

1. You should \_\_\_\_\_ the car carefully before you buy it.
2. Since getting that job, she has been a \_\_\_\_\_ character and appearance.
3. \_\_\_\_\_ drug users are at particular risk of contracting the disease.
4. The committee will find it difficult to \_\_\_\_\_ this decision.
5. His term paper was \_\_\_\_\_ by the advisor.
6. I wanted to book a hotel room during the New Year but there were no \_\_\_\_\_.
7. She used an \_\_\_\_\_ against the cockroach that had infested the kitchen.
8. Tommy offered her a fabulous present, but she wouldn't \_\_\_\_\_ it.
9. The child \_\_\_\_\_ her parents.
10. I prefer to live in a \_\_\_\_\_ because I can make friends from other program.

**Exercise 4-13: The “measure” root****Directions:** Use the words from the list with their corresponding definitions.

*anemometer / barometer / diameter / metronome / odometer / optometer / photometer / pulsometer / speedometer / voltmeter*

1. A \_\_\_\_\_ is any device used for measuring the voltage between two points on an electric circuit.
2. A device that is used to measure the light intensity or light meter is called a \_\_\_\_\_.
3. A \_\_\_\_\_ is a straight line from one side of a circle to the other side, passing through the centre of the circle.
4. An \_\_\_\_\_ is a device in a vehicle that measures and shows the distance it travels.
5. A device in a vehicle that shows how fast the vehicle is moving is called a \_\_\_\_\_.
6. A \_\_\_\_\_ is a piece of equipment that makes a regular repeated sound like a clock, showing the speed at which music should be played.
7. An \_\_\_\_\_ is an instrument for measuring the power of the eyesight.
8. A device for measuring air pressure is called \_\_\_\_\_.
9. A \_\_\_\_\_ is a device that measures the strength of the pulse.
10. An \_\_\_\_\_ is a device that measures the speed and force of wind.

**Exercise 4-14: The ‘measure’ root****Directions:** Use a word from the list to complete the meanings of each sentence.

*anemometer / barometer / diameter / metronome / odometer / optometer / photometer / pulsometer / speedometer / voltmeter*

1. A \_\_\_\_\_ watch can be used to measure one’s pulse.
2. You can find great deals on eBay for a digital \_\_\_\_\_ which displays its reading in terms of volts.
3. Most \_\_\_\_\_ detect the light with photo resistors or photodiodes.
4. The pond is six feet in \_\_\_\_\_.
5. Here’s how to reprogram your digital \_\_\_\_\_ to read whatever mileage you want.
6. Your phone is now a fully functional analog/digital \_\_\_\_\_.
7. \_\_\_\_\_ online is reliable, simple to use and helps with your rhythm and tempo while practicing music.
8. An objective infrared \_\_\_\_\_ has been designed, based on the optical principles of eccentric photo refraction.
9. A storm glass is a type of \_\_\_\_\_ used centuries ago.

10. NASA is considering a mission to Venus that would use an \_\_\_\_\_ to measure wind speed on that planet.

**Exercise 4-15: Reading and vocabulary**

**Directions:** Read the following paragraph and use your knowledge of roots to identify the meaning of each of the word in boldfaced type. Use a dictionary if necessary.

When you think of the word **psychology** what first comes to mind? Formally defined psychology is the **scientific**, study of behavior and mental process. Let's consider the three key terms in this definition: science, behavior, and mental process. As a science, psychology uses **systematic** methods to observe human behavior and draw conclusions. The goals of psychological science are to **describe**, **predict**, and explain behavior. In addition, psychologists are often interested in controlling or changing behavior, and they use scientific methods to examine interventions that might help, for example, reduce violence or promote happiness. (King, 2011, 2008, p. 4)

1. psychology: \_\_\_\_\_
2. scientific \_\_\_\_\_
3. systematic: \_\_\_\_\_
4. describe: \_\_\_\_\_
5. predict: \_\_\_\_\_

**Exercise 4-16: Create the sentences**

**Directions:** Write sentences using the words provided.

1. psychology: \_\_\_\_\_
2. scientific \_\_\_\_\_
3. systematic: \_\_\_\_\_
4. describe: \_\_\_\_\_
5. predict: \_\_\_\_\_

## Chapter 5

### Academic Vocabulary

#### **Introduction**

Vocabulary is central in learning the English language, especially for college students. Lacking proper knowledge of the vocabulary will greatly limit one's communication skills and understanding of English. (Nation, 2001) Therefore, learning new words is the most effective way for those who use English as their second language to successfully communicate and understand the language effectively. As learners of English, and for those who are preparing for academic study, they need to learn general academic vocabulary and core academic vocabulary which are used in many different subject areas. Therefore, in this chapter, we will focus on academic words and discipline-specific words from various fields.

#### **Academic Word List**

Students who study English, and use it as a second language (ESL/ EFL) should learn and understand English in order to effectively use it for reading and understanding academic texts. (Nation & Waring, 1997) The academic word list is commonly used in wide range of academic texts. Students will encounter them frequently in school textbooks but not quite as often in other types of reading materials such as novels, newspaper and magazine articles, etc. By learning the words in the Academic Word list, ESL/EFL students will greatly increase their ability to expand academic vocabulary and improve comprehension of academic texts.

The academic word list as shown in the Appendix is compiled from the Academic Word List (AWL) (Coxhead, 2000), New Academic Word List (Browne, Culligan & Phillips, 2013) and Academic Keyword List (AKL) (Paquot, 2010) which contains 1,616 potential academic words and phrases which are reasonably frequent in a wide range of academic texts or the academic corpus, but relatively uncommon in other kinds of materials. The wordlist shown in the chart below contains 570 word families and has been divided into 10 sublists based on the frequency of occurrence of the words in academic texts. Sublist 1 consists of the most common words in the AWL; Sublist 2 contains the next most frequently used words. There are 60 word families in each sublist, except for sublist 10 which contains 30. The following tables contain the most frequent academic words arranged in alphabetical order (Coxhead, 2000). The list also shows both British and American English spelling.

**Table 5-1 The most frequent members of the word families in Sublist 1 of the AWL**

analysis	definition	indicate	procedure
approach	derived	individual	process
area	distribution	interpretation	required
assessment	economic	involved	research
assume	environment	issues	response
authority	established	labour	role
available	estimate	legal	section
benefit	evidence	legislation	sector
concept	export	major	significant
consistent	factors	method	similar
constitutional	financial	occur	source
context	formula	percent	specific
contract	function	period	structure
create	identified	policy	theory
data	income	principle	variables

**Table 5-2 The most frequent members of the word families in Sublist 2 of the AWL**

achieve	consequences	institute	region
acquisition	construction	investment	regulations
administration	consumer	items	relevant
affect	credit	journal	resident
appropriate	cultural	maintenance	resources
aspects	design	normal	restricted
assistance	distinction	obtained	security
categories	elements	participation	sought
chapter	equation	perceived	select
commission	evaluation	positive	site
community	features	potential	strategies
complex	final	previous	survey
computer	focus	primary	text
conclusion	impact	purchase	traditional
conduct	injury	range	transfer

**Table 5-3 The most frequent members of the word families in Sublist 3 of the AWL**

alternative	criteria	interaction	registered
circumstances	deduction	justification	reliance
comments	demonstrate	layer	removed
compensation	document	link	scheme
components	dominant	location	sequence
consent	emphasis	maximum	sex
considerable	ensure	minorities	shift
constant	excluded	negative	specified
constraints	framework	outcomes	sufficient
contribution	funds	partnership	task
convention	illustrated	philosophy	technical
coordination	immigration	physical	techniques
core	implies	proportion	technology
corporate	initial	published	validity
corresponding	instance	reaction	volume

**Table 5-4 The most frequent members of the word families in Sublist 4 of the AWL**

access	debate	internal	prior
adequate	despite	investigation	professional
annual	dimensions	job	project
apparent	domestic	label	promote
approximated	emerged	mechanism	regime
attitudes	error	obvious	resolution
attributed	ethnic	occupational	retained
civil	goals	option	series
code	granted	output	statistics
commitment	hence	overall	status
communication	hypothesis	parallel	stress
concentration	implementation	parameters	subsequent
conference	implications	phase	sum
contrast	imposed	predicted	summary
cycle	integration	principal	undertaken

**Table 5-5 The most frequent members of the word families in Sublist 5 of the AWL**

academic	enable	license	pursue
adjustment	energy	logic	ratio
alter	enforcement	marginal	rejected
amendment	entities	medical	revenue
aware	equivalent	mental	stability
capacity	evolution	modified	styles
challenge	expansion	monitoring	substitution
clause	exposure	network	sustainable
compounds	external	notion	symbolic
conflict	facilitate	objective	target
consultation	fundamental	orientation	transition
contact	generated	perspective	trend
decline	generation	precise	version
discretion	image	prime	welfare
draft	liberal	psychology	whereas

**Table 5-6 The most frequent members of the word families in Sublist 6 of the AWL**

abstract	diversity	incidence	nevertheless
accurate	domain	incorporated	overseas
acknowledged	edition	index	preceding
aggregate	enhanced	inhibition	presumption
allocation	estate	initiatives	rational
assigned	exceed	input	recovery
attached	expert	instructions	revealed
author	explicit	intelligence	scope
bond	federal	interval	subsidiary
brief	fees	lecture	tapes
capable	flexibility	migration	trace
cited	furthermore	minimum	transformation
cooperative	gender	ministry	transport
discrimination	ignored	motivation	underlying
display	incentive	neutral	utility

**Table 5-7 The most frequent members of the word families in Sublist 7 of the AWL**

adaptation	deny	identical	release
adults	differentiation	ideology	reverse
advocate	disposal	inferred	simulation
aid	dynamic	innovation	solely
channel	eliminate	insert	somewhat
chemical	empirical	intervention	submitted
classical	equipment	isolated	successive
comprehensive	extract	media	survive
comprise	file	mode	thesis
confirmed	finite	paradigm	topic
contrary	foundation	phenomenon	transmission
converted	global	priority	ultimately
couple	grade	prohibited	unique
decades	guarantee	publication	visible
definite	hierarchical	quotation	voluntary

**Table 5-8 The most frequent members of the word families in Sublist 8 of the AWL**

abandon	contradiction	induced	random
accompanied	crucial	inevitably	reinforced
accumulation	currency	infrastructure	restore
ambiguous	denote	inspection	revision
appendix	detected	intensity	schedule
appreciation	deviation	manipulation	tension
arbitrary	displacement	minimised	termination
automatically	dramatic	nuclear	theme
bias	eventually	offset	thereby
chart	exhibit	paragraph	uniform
clarity	exploitation	plus	vehicle
conformity	fluctuations	practitioners	via
commodity	guidelines	predominantly	virtually
complement	highlighted	prospect	widespread
contemporary	implicit	radical	visual

**Table 5-9 The most frequent members of the word families in Sublist 9 of the AWL**

accommodation	conversely	mature	restraints
analogous	device	mediation	revolution
anticipated	devoted	medium	rigid
assurance	diminished	military	route
attained	distorted/distorti	minimal	scenario
behalf	on	mutual	sphere
bulk	duration	norms	subordinate
ceases	erosion	overlap	supplementary
coherence	ethical	passive	suspended
coincide	format	portion	team
commenced	founded	preliminary	temporary
incompatible	inherent	protocol	trigger
concurrent	insights	qualitative	unified
confined	integral	refine	violation
controversy	intermediate	relaxed	vision
	manual		

**Table 5-10 The most frequent members of the word families in Sublist 10 of the AWL**

adjacent	depression	levy	posed
albeit	encountered	likewise	reluctant
assembly	enormous	nonetheless	so-called
collapse	forthcoming	notwithstanding	straightforward
colleagues	inclination	odd	undergo
compiled	integrity	ongoing	whereby
conceived	intrinsic	panel	
convinced	invoked	persistent	

### Discipline-specific Vocabulary for Use in the Academic Area

Apart from knowing frequently occurring and general academic words, it is also necessary to know the specific words of subjects or discipline-specific vocabulary. Most academic disciplines have their own language: a set of specialized words and phrases that have very specific meanings within the field. McWhorter & Sember (2009), Dale, Glanze & O'Rourke (1981) and Horny (2010) suggest high-utility vocabulary specific to the disciplines of allied health and medicine, biology, business, chemistry, computers and information systems, education, geography, history, language, law and criminal justice, mathematics, music, physical science, politics and government, psychology and sociology, visual arts, and religion.

**Table 5-11 Allied health and medicine**

<b>Core terms</b>	<b>Meaning</b>
abscess	collection of pus
acute	sudden and requiring immediate
allergy	body sensitivity
anemia	weakness due to lack of red blood cells
antidote	remedy for poison
asthma	disease making breathing difficult
asymptomatic	without symptoms
benign	nonthreatening, noncancerous
biopsy	the removal of tissue for the purpose of determining the presence of cancerous cells
chronic	constant, continuous
contagion	spreading of disease
contraindications	conditions suggesting that a drug should not be used
convalescent	getting well
diabetes	disease of pancreas
health care proxy	a legal document that designates another person who can make medical decisions for a person who is unable to direct his or her own care
hemorrhage	bleeding
holistic	viewing the body as a whole organism
HMO (Health Maintenance Organization)	an organization established to provide health care to its members at a fixed price
idiosyncratic	unusual or abnormal
immune	protected from disease
inoculation	the injection or transfer of a substance into the body
intravenous	inserting a medication or fluid into the vein using a needle or tube
living will	a document that specifies the type of care a person does and does not want to receive when his or her death is likely
malignant	cancerous
malpractice	professional negligence
noninvasive procedures	tests or treatments in which the skin and body are not entered
Nurse Practitioner (NP)	a registered nurse who has received additional training in an area of specialty
outpatient	medical treatment that does not require overnight hospital care

**Table 5-11 Allied health and medicine (continued)**

<b>Core terms</b>	<b>Meaning</b>
predisposition	the tendency or susceptibility to develop a certain disease or condition
prognosis	prediction of the course outcome of a disease or illness
reaction	a response by the body, usually a bad one, to a drug, chemical substance, etc.
rehabilitation	the process of assisting patients to regain a state of health
side effect	an extra and usually bad effect that a drug has on you

**Table 5-12 Biology**

<b>Core terms</b>	<b>Meaning</b>
botany	the scientific study of plant life
carnivore/herbivore/omnivore	carnivores are flesh-eating animals; herbivores are animals that feed primarily on plants; omnivores are organisms that consume both plants and animals
chromosomes	a part of the nucleus of animal and plant cells that carries genes and helps transmit hereditary information
DNA (Deoxyribonucleic Acid)	the material of which genes are composed
fauna/flora	fauna are the animals of a particular region; flora are the plants of a particular region
genes	the fundamental hereditary unit, found on chromosomes, that controls the development of hereditary characteristics
genetics	the branch of biology that studies heredity
habitat	the natural environment in which a plant or animal lives
hibernation/estivation	hibernation refers to passing the winter in a dormant state; estivation refers to spending the summer in a dormant state
homeostasis	the tendency of an organism to maintain a stable internal environment
marsupials	animals such as kangaroos whose newborn live in external pouches where they feed and further develop
mammals	warm-blooded vertebrates, including humans, characterized by hair on the skin, and, in the female, milk-producing mammary glands

**Table 5-12 Biology (continued)**

<b>Core terms</b>	<b>Meaning</b>
metabolism	chemical reactions that involve the synthesis or breakdown of molecules within a living cell
mutation	a permanent structural change in a DNA molecule that may result in a new trait or characteristic
natural selection	the theory that the surviving plants and animals of a particular species are those that are strongest and most adaptable
taxonomy	the classification of organisms into categories or systems based on shared characteristics
toxin/antitoxin	a toxin is a poisonous substance produced by an organism; an antitoxin is a substance formed in response to a toxin for the purpose of neutralizing it
transpiration	the loss of water vapor through the membrane or pore of an organism; usually associated with plants during photosynthesis or cooling
vertebrate/invertebrate	a vertebrate is an animal that has a backbone or spinal column; an invertebrate does not
zoology	the scientific study of animals

**Table 5-13 Business**

<b>Core terms</b>	<b>Meaning</b>
analyst	a person whose job involves examining facts or materials in order to give an opinion on them
assets	the resources (properties) a firm owns
audit	an examination of a company's records to check for accuracy
CEO (Chief Executive Officer)	the person responsible for managing the day-to-day operations of a company and carrying out the policies established by the board of directors
compound interest	interest on interest and principal
commerce	trade
contract	an official written agreement
deflation	a decrease in the level of prices or an increase in purchasing power due to a reduction in available currency and credit
deficit	inadequate or insufficient funds; the amount a sum of money falls short of the required amount

**Table 5-13 Business (continued)**

<b>Core terms</b>	<b>Meaning</b>
dividend	a distribution of earnings to the stockholders of a company
depreciation	loss in value due to age, use, or market worth
entrepreneur	a person who initiates and assumes the risks of starting a new business
equity	the remaining value of a business or property once debts and mortgages are subtracted
fiscal year	a 12-month period of time in which a business operates and tallies its income and expenses
franchise	an individually owned business that is associated with a chain of stores and operates under the chain's guidelines
GNP (Gross National Product)	the total dollar amount of all goods and services produced by all citizens in a country in a given one-year period
gross income	the total dollar amount of all goods and services sold during a specific period; total income before expenses are deducted
inflation	a general rise in level of prices or a decline in purchasing power due to the lessening value of the dollar
liabilities	a firm's debts and financial obligations
merger	combining of companies
monopoly	an industry in which there is only one company that sells a product or service
mortgage	claim on property
net income	the profit earned by a company or individual after all expenses have been subtracted from total income
productivity	the average level of output per worker per hour
recession	two consecutive three-month periods of decline in a country's gross domestic product
sole proprietorship	a business that is owned and operated by one person
tariff	tax on imports and exports
trust	property held for another
usury	high interest rates

**Table 5-14 Chemistry**

<b>Core terms</b>	<b>Meaning</b>
acid	sour chemical compound
electron	electrically charged atomic particle
valence	capacity to unite, react, or interact
chromosome	body carrying hereditary traits
compound	chemical union
dehydration	removal of water
dissolve	make liquid
distill	condense from vapor
element	basic chemical substance
formula	recipe for chemicals
gas	not liquid or solid (like steam)
laboratory	testing room

**Table 5-15 Computers and information systems**

<b>Core terms</b>	<b>Meaning</b>
attachment	a document that you send to somebody using email
blog	a website where a person writes regularly about recent event or topic that interest them
chat room	an area on the Internet where people can communicate with each other, usually about one particular topic
cookie	an entry or a file placed on the user's hard drive that stores user profiles. It is often used to personalize a Web site for a frequent visitor
cyberspace	the Internet and other networks, and the virtual communities they form
download	to receive and transfer a file electronically from a remote computer
emoticons (smileys)	small graphic images produced using keyboard characters that writers substitute for facial expressions
GUI (Graphical User Interface)	an interface that represents programs ,files, and options as graphical images instead of text
hacker	a highly skilled computer user who accesses computer files and systems illegally or without authorization
homepage	a Web page that functions as an introduction or front door entrance to other Web site
links (hyperlinks)	a text or image that connects the user to other pages or to other Web sites

<b>Table 5-15 Computers and information systems (continued)</b>	
<b>Core terms</b>	<b>Meaning</b>
listserv	an ongoing discussion group on a particular topic or issue in which participants subscribe through a central service; listservs may have a moderator who manages information flow and connect
MIME(Multipurpose Internet Mail Extensions) attachment	a file that is attached to an e-mail message
multimedia	software that combines words, graphics, sound, and video
netiquette	the appropriate behavior expected on the Internet; a combination of the words <i>Net</i> (from Internet) and <i>etiquette</i>
network	a computer system that uses communication equipment to connect two or more computers
RAM(Random Access Memory) and ROM(Read-Only Memory)	RAM is the computer's electronic memory; it contains data that can be entered into a computer file. ROM is the computer's preprogrammed memory; it can be read but not altered
search engine	a research tool that allows users to enter keywords to search the Internet for information
social networking	communication with people who share your interests using a website or other service on the Internet
upload	to send a file or application from a local computer to another computer over the Internet
URL(Uniform Resource Locator)	a string of characters that serves as an address for a file or site on the World Wide Web
Virtual Reality (VR)	a system that uses three-dimensional graphics to create an imaginary place that seems very realistic
virus	an unauthorized program that attaches itself to other computer programs and, after reproducing itself, causes damage or destroys data in those programs
World Wide Web (WWW)	part of the Internet containing documents and images connected by hyperlinks

**Table 5-16 Education**

<b>Core terms</b>	<b>Meaning</b>
ability grouping	the arrangement of students into classes based on mastery of specific skills, such as reading or math
accountability	a policy requiring that student progress measured and teachers be responsible for student progress
bilingual education	an educational program that teaches a second language (often English) to students whose first language is not English and maintains the students' native language as well
collaborative learning	a learning situation in which students work together on a project or assignment
competency testing	the measurement of a student's ability to perform a specific skill (such as multiplication) or achieve a specified level (such as reading at a sixth-grade level)
cultural literacy	the familiarity with a body of knowledge that most educated people in a given society share
curriculum	a subject that are included in a course of study or taught in a school, college, etc.
electronic classroom	a learning environment in which students have access to computers, the Internet, and multimedia sources of information
gifted and talented program	a program of supplemental instruction designed to stimulate and further the growth of students who exhibit high intelligence or exceptional mastery of skills
home schooling	a policy that allows qualified parents to educate their children at home
instructional objectives	specific learning goals or accomplishments that a school or teacher establishes for students; objectives identify what a student is to learn
learning community	an interactive environment in which teachers and students come together to provide respectful and positive feedback for learning
literacy	the ability to read and write (Math and computer skills are sometimes considered literacy skill as well)
magnet school	a school that offers special, unique programs to attract students from within a school district
performance assessment	a form of testing that requires students to show what they know by actually doing something, such as performing a specific task

**Table 5-16 Education (continued)**

<b>Core terms</b>	<b>Meaning</b>
phonics	a method of teaching reading that emphasizes letters and the sounds associated with them
school board	a group of elected officials that serves as a governing body of a school district
standardized test	a formal, usually commercial test that is administered according to specific directions with time limitations. It is often machine scored; results often compare students' abilities to others in the class, the district, the state, or the nation
tenure	a policy that allows teachers to hold their positions on a permanent basis without periodic contract renewals
text	a book, play, etc., especially one studied for an exam
whole language	a method of teaching that integrates reading, writing, speaking, and listening

**Table 5-17 Geography**

<b>Core terms</b>	<b>Meaning</b>
isthmus	connecting neck of land
plateau	high plain
sierra	rang of hills
belt	broad strip or band
cape	point of land
international	between or among countries
meridian	line of longitude
outlet	stream flowing out from a body of water
planet	a large, round object in space moving around the sun
tropics	earth's hottest climate belt
tundra	level, treeless plain in Arctic regions
urban	of a city or cities

**Table 5-18 History**

<b>Core terms</b>	<b>Meaning</b>
enact	make law
bicameral	two-house legislature
dynasty	one-family rule
emancipation	setting free
unicameral	one-house legislature
caste	social class

**Table 5-18 History (continued)**

<b>Core terms</b>	<b>Meaning</b>
epoch	period in history
autonomy	self-government
franchise	right to vote
colony	territory with ties to parent state
democracy	majority rule
socialism	belief in government ownership

**Table 5-19 Language**

<b>Core terms</b>	<b>Meaning</b>
accentuation	stress on word parts
anthology	collection of writings
antonym	word with opposite meaning
conjugation	verb formation
etymology	study of word history
euphemistic	pleasantly expressed
homily	moral writing
hyperbole	exaggeration
inflection	voice variation
metaphor	indirect comparison
simile	direct comparison
synonym	word with same meaning

**Table 5-20 Law and criminal justice**

<b>Core terms</b>	<b>Meaning</b>
acquit	clear of blame
affidavit	a voluntary written statement sworn to before an authorized official
arraignment	an appearance in court prior to a criminal trial; often the identity of the defendant is established, the defendant is informed of the charges and of his or her rights, and the defendant is required to enter a plea
convict	find guilty
defendant	a person accused of a crime against whom legal action is brought
deposition	a statement made under oath outside of court that is intended to be used as evidence in court
entrapment	improper or illegal encouragement by law enforcement agents for a person to commit a crime

**Table 5-20 Law and criminal justice (continued)**

<b>Core terms</b>	<b>Meaning</b>
fraud	intentional deception in order to secure unfair or unlawful gain
hearing	court review of facts
hearsay	something not based on the personal observations of a witness; it is not usually allowed to be entered as evidence
indictment	a formal written accusation, submitted to the court by a grand jury ,alleging that a certain person has committed a serious crime
infringement	a violation of a right, law, or contract; wrongful use of a copy right or trade name
injunction	a court order prohibiting a person from doing a specific act
jurisdiction	the territory, subject matter, or people over which a court has authority
jury	group of persons who decide
lien	the right to take, hold, or sell the property of a debtor as security or payment for a debt
litigation	legal proceedings
misdemeanor	a criminal offense lesser than a felony usually punishable by a fine or by imprisonment other than in a penitentiary
offense/offence	crime
plaintiff	a person who initiates or begins a legal action
plea bargain	to plead guilty to a lesser charge than that of which one is accused; often used in exchange for information or cooperation as a witness by the accused
prosecute	bring to trial
proxy	a document in which one person is legally appointed to represent another
sentence	punishment
statute	a law enacted by a legislative body
testify	talk before the court
tort	damage, injury, or wrongful act done willingly against a person or property for which a civil suit can be brought

**Table 5-20 Law and criminal justice (continued)**

<b>Core terms</b>	<b>Meaning</b>
venue	the place where a crime is committed; also, the geographical area in which a court may hear or try a case
verdict	legal judgment
witness	one who testifies

**Table 5-21 Mathematics**

<b>Core terms</b>	<b>Meaning</b>
centimeter	$\frac{1}{100}$ of a meter
congruent	coinciding
decimal	a fraction like .60
denominator	number below the line in a fraction ( $\frac{1}{2}$ )
difference	result of subtraction
dividend	number to be divided
fraction	a number that results from dividing one whole number by another
numerator	the number in a fraction that is above the line and that is divided by the number below the line
per cent	1 unit in 100
perimeter	distance around the edge
product	result of multiplying
quotient	result of division
square root of 4	$2 (2 \times 2 = 4)$
volume	quantity held

**Table 5-22 Music**

<b>Core terms</b>	<b>Meaning</b>
airplay	time that is spent broadcasting a particular record, performer, or type of music on the radio
acapella	vocal music performed without instrumental accompaniment
acoustic	designed to make natural sound, not sound produced by electrical equipment
bass	lowest male voice
beat	mark of rhythm
chord	many notes in harmony
composer	one who writes music

**Table 5-22 Music (continued)**

<b>Core terms</b>	<b>Meaning</b>
consonance	a combination of sounds considered to be pleasing and harmonious
concert	a public performance of music
crescendo	a gradual increase in how loudly a piece of music is played or sung
dissonance	disagreeable sounds or those lacking harmony
ensemble	group of musicians; a musical work performed by two or more musicians or a group of musicians
lyrics	words for songs
maestro	a composer, conductor, or teacher of special importance; master of a particular art
medley	a musical composition made up of passages selected from different musical works
measure	unit of music
melody	a piece of music consisting of several songs or tunes played or sung one after the other
note	single musical sound
orchestra	group of musicians
rendition	a style or interpretation of a musical piece
repertoire	a list of musical works a group of musicians is able to perform
rhythm	a regular pattern of sounds or musical notes created by the variation of the duration and stress of musical notes
scale	series of tones
symphony	a musical piece consisting of three or more movements to be played by an orchestra; a large-scale, complex musical piece and also refers to an orchestra itself
woodwinds	wind instruments of wood or metal

**Table 5-23 Physical science**

<b>Core terms</b>	<b>Meaning</b>
anatomy	animal or plant structure
chain reaction	many effects from a cause
dissect	cut apart for examination
gravity	earth's pull
kinetic	resulting from motion
mass	quantity of matter
nuclear	atomic

**Table 5-23 Physical science (continued)**

<b>Core terms</b>	<b>Meaning</b>
saturated	filled to maximum concentration
solvent	substance that dissolves
sound barrier	speed of sound
vacuum	empty space

**Table 5-24 Politics and government**

<b>Core terms</b>	<b>Meaning</b>
appropriation	a designated amount of public funds set aside support a particular project or program
capitalism	an economic system in which individuals and corporations, not the government, own businesses
disenfranchise	to deprive an individual of the right of citizenship, especially the right to vote
conservative	a person who favors state and local government over the federal government's intervention
electoral college	an electoral body that officially elects the president and vice president of the United States
entitlement	a law or policy requiring the government to pay money to people or groups meeting a specific set of conditions or criteria
expenditures	federal spending of the money the government receives as revenue (income) from sources such as taxes (major expenditures are medicare, social security, and the military)
impeachment	the process of charging a political official with improper conduct while in office
incumbent	a person who currently holds a political office
lame duck	an elected official whose power is reduced because he or she has not been reelected to the position or is not allowed to run for the same office again
left wing	a liberal or ultraliberal portion of a group
liberal	a person who favors governmental action to achieve equal opportunity for all
lobbying	the process of attempting to persuade or influence the decision making of a government official by someone acting on behalf of person or group

**Table 5-24 Politics and government (continued)**

<b>Core terms</b>	<b>Meaning</b>
pacifism	the belief that war and violence are not effective or acceptable means of solving problems or settling disagreements
patronage	awarding a job, promotion, or contract for political reasons rather than merit or competence
revenues	sources of income of a government; the income tax is a primary source of revenue
referendum	a state-level process that gives voters the opportunity to approve or disapprove legislation or a constitutional amendment
right wing	a conservative or ultraconservative portion of group
socialism	an economic system in which businesses are owned collectively by the government
veto	the right of one branch of government to refuse approval of measures proposed by another branch, especially the power of the president to reject a bill proposed by Congress

**Table 5-25 Psychology and Sociology**

<b>Core terms</b>	<b>Meaning</b>
case studies	a type of research that involves close, in-depth observation and analysis of individual people
cognition	a mental process such as thinking, remembering, and understanding
culture	a system for living that includes objects, values, and characteristics that people acquire as members of a society
defense mechanism	a method of reducing anxiety by denying or distorting a situation or problem
empirical	refers to information obtained from, or that can be verified by, observation or experimentation
ethnic group	a collection of people who share a cultural heritage
ethnocentrism	the belief that one's own culture is superior to that of others
hypothesis	a tentative explanation about how various events are related to one another that can be tested by further experimentation
intelligence	the capacity to learn from experience and to adapt to one's environment

**Table 5-25 Psychology and sociology (continued)**

<b>Core terms</b>	<b>Meaning</b>
learning	a relatively permanent change in knowledge or behavior that results from experience
multiculturalism	the study of diverse racial and ethnic groups within a culture
norms	culturally based rules about appropriate behavior in social situations
peer group	a group whose members share the same age or common interests
reinforcement	a reward or the process of giving a reward after a desirable behavior has occurred
sanction	a reward for conforming to what is expected or a punishment for violating expectations
social class	a category of people who have approximately equal income, power, and prestige
status	one's position in a group or society
stereotypes	oversimplified, inaccurate mental pictures or conceptions of others
value	a socially agreed upon idea about what is good, desirable, or important
variable	a characteristic that changes from person to person within a population being studied

**Table 5-26 Visual arts**

<b>Core terms</b>	<b>Meaning</b>
aesthetics	the study of the nature, meaning, and expression of beauty, as found in painting, sculpture, and drawing
collage	a work made by gluing or pasting a variety of materials such as paper, fabric, or photographs on a flat surface
form	the shape or configuration of an artistic work
impressionism	a style of painting that is known for short brush strokes to simulate the reflection of light, and for the use of primary colors
mosaic	an art form in which small squares of marble or other material are laid together to form a pattern or design
portrait	a painting, drawing or photograph of a person, especially of the head and shoulders
proportion	the relationship between parts with respect to size, quantity, or degree

**Table 5-26 Visual arts (continued)**

<b>Core terms</b>	<b>Meaning</b>
realism	a style of painting that intends to show life and objects accurately, as they actually are
sculpture	a work of art made by carving or shaping wood, stone, clay, metal, etc.
structure	the manner in which the parts of a work are combined
surrealism	a style of painting that attempts to express the workings of the subconscious mind
texture	the appearance and feel of the surface of an artistic work

**Table 5-27 Religion**

<b>Core terms</b>	<b>Meaning</b>
apocalypse	revelation
beatitude	blessing
creed	set of beliefs
dogma	religious belief
Eucharist	Holy Communion
genesis	creation
Hanukkah	Jewish ‘Feast of Lights’
messiah	savior
parable	truth shown by tale
revelation	act of making known
theology	study of God
vespers	early evening prayers

## Summary

This chapter has provided students with definitions, examples, and exercises on based on the Academic Word List, the most frequent academic words in the Academic Corpus and discipline-specific vocabulary. College or university students can benefit from being familiar with general academic words as well as specific words from various fields of knowledge to significantly improve their understanding of academic texts and help in improving their writing skills and proper usage of the English language.

## Exercises

### **Exercise 5-1: The AWL**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

#### **Column A**

1. \_\_\_\_ culture
2. \_\_\_\_ legal
3. \_\_\_\_ analyze
4. \_\_\_\_ challenge
5. \_\_\_\_ achieve
6. \_\_\_\_ comment
7. \_\_\_\_ bias
8. \_\_\_\_ access
9. \_\_\_\_ fundamental
10. \_\_\_\_ guideline

#### **Column B**

- a. to examine or think about something carefully
- b. to find information, especially on a computer
- c. to unfairly influence attitudes, choices, or decisions
- d. relating to the most basic and important parts of something
- e. a new or difficult task that tests somebody's ability and skill
- f. rules or instructions about the best way to do something
- g. connected with the law
- h. the beliefs, way of life, art, and customs that are shared and accepted by people in a particular society
- i. an opinion that you express about someone or something
- j. to successfully complete something or get a good result, especially by working hard

### **Exercise 5-2: The AWL**

**Directions:** Use a word from the list to complete the meanings of each sentence.

*access / achieved / analyze / bias / challenge / comments / culture / fundamental / guidelines / legal*

1. My father was arrested because he had drunk more than the \_\_\_\_\_ limit of alcohol.
2. First year students have to take \_\_\_\_\_ subjects.
3. I am confident that he now faces the biggest \_\_\_\_\_ his career.
4. I need to \_\_\_\_\_ the data before making a decision.
5. Some companies still have a strong \_\_\_\_\_ against women.
6. The \_\_\_\_\_ from the teacher about our presentation were highly favorable.
7. In Japanese \_\_\_\_\_, people bow to each other when they meet.
8. My sister finally \_\_\_\_\_ her goal of becoming a doctor.
9. She cannot \_\_\_\_\_ her e-mail account, there must be something wrong with her internet connection.

10. You have to follow the essay writing \_\_\_\_\_ to ensure your essay has the proper format.

### **Exercise 5-3: The AWL**

**Directions:** Choose 5 words from the list to create your own sentences.

*access / achieved / analyze / bias / challenge / comments / culture / fundamental / guidelines / legal*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### **Exercise 5-4: Discipline-specific vocabulary I**

**Directions:** Match the words from column A with their corresponding definitions in column B. Write your answers in the spaces provided.

#### **Column A**

1. \_\_\_\_ entrepreneur
2. \_\_\_\_ phonics
3. \_\_\_\_ asthma
4. \_\_\_\_ search engine
5. \_\_\_\_ hacker
6. \_\_\_\_ CEO (Chief Executive Officer)
7. \_\_\_\_ democracy
8. \_\_\_\_ toxin
9. \_\_\_\_ dehydration
10. \_\_\_\_ collaborative learning

#### **Column B**

- a. a medical condition that causes difficulties in breathing
- b. a poisonous substance, especially one that is produced by bacteria and causes a particular disease
- c. the person with the most authority in a large company
- d. someone who starts a new business or arranges business deals in order to make money, often in a way that involves financial risks
- e. a drop below normal levels of water in the body
- f. someone who hacks into other people's computer systems
- g. a computer program that finds information on the internet by looking for words that you have typed in
- h. a situation in which two or more people work together on a project or assignment
- i. a method of teaching people to read in which they are taught to recognize the sounds that letters represent
- j. a system of government in which every citizen in the country can vote to elect its government officials

**Exercise 5-5: Discipline-specific vocabulary I****Directions:** Use a word from the list to complete the meanings of each sentence.

*asthma / CEO (Chief Executive Officer) / collaborative learning / dehydration / democracy / entrepreneurs / hacker / phonics / search engine / toxin*

1. \_\_\_\_\_ is a technique in teaching that can help improve learning in a classroom.
2. When we lose too much water, our bodies may become out of balance or dehydrated and severe \_\_\_\_\_ can lead to death.
3. A \_\_\_\_\_ who gets into the system may be motivated by a multitude of reasons, such as profit, protest, challenge, enjoyment.
4. Many countries, nations, and states are governed or ruled by a \_\_\_\_\_.
5. My sister has created a fun and child centered approach to teaching literacy through synthetic \_\_\_\_\_.
6. Google is on the top 15 Most Popular \_\_\_\_\_ as derived from the eBizMBA Rank.
7. Most \_\_\_\_\_ that cause problems in humans are released by germs such as bacteria.
8. \_\_\_\_\_ is the most common chronic disease in childhood.
9. Satya Narayana Nadella has been \_\_\_\_\_ of Microsoft since 4 February 2014.
10. Business owners can gain insight into what makes a business successful by studying the top \_\_\_\_\_.

**Exercise 5-6: Discipline-specific vocabulary I****Directions:** Choose 5 words from the list to create your own sentences.

*asthma / CEO (Chief Executive Officer) / collaborative learning / dehydration / democracy / entrepreneurs / hacker / phonics / search engine / toxin*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Exercise 5-7: Discipline-specific vocabulary II****Directions:** Use a word from the list to complete the meanings of each sentence.

*anatomy / centimeter/ defendant / hypothesis / intelligence / impressionism / lyric / metaphor / revenue / synonym*

1. \_\_\_\_\_ means an expression, often found in literature, that describes something by referring to it as something different and suggesting that it has similar qualities to that thing.
2. A word or phrase with the same or nearly the same meaning as another word or phrase in the same language is called \_\_\_\_\_.
3. \_\_\_\_\_ is a person in a law case who has been accused of doing something illegal.
4. \_\_\_\_\_ is a unit for measuring length. There are 100 centimeters in one meter.
5. The words that make up a song usually consisting of verses and choruses are called \_\_\_\_\_.
6. \_\_\_\_\_ is the scientific study of the structure of human or animal bodies and how its parts are arranged.
7. \_\_\_\_\_ means the money that the government receives from tax.
8. The \_\_\_\_\_ can be described as an idea that is suggested as an explanation for something, but that has not yet been proved.
9. The \_\_\_\_\_ is a style of painting which uses color instead of details of form to produce effects of light or feeling.
10. The capacity to learn from experience and to adapt to one's environment is called \_\_\_\_\_.

**Exercise 5-8: Discipline-specific vocabulary II****Directions:** Use a word from the list to complete the meanings of each sentence.

*anatomy / centimeters / defendant / hypothesis / intelligence / impressionism / lyrics / metaphor / revenue / synonym*

1. He uses very creative images and \_\_\_\_\_ in his writing.
2. The government examines the scheme to raise \_\_\_\_\_ without putting up taxes.
3. The words “shut” and “close” are \_\_\_\_\_.
4. The \_\_\_\_\_ has rights to remain silent and to refuse to incriminate himself.
5. Understanding of human \_\_\_\_\_ is essential to figure drawing.
6. I like to learn English and other languages through music and the \_\_\_\_\_ of my favorite songs.

7. The \_\_\_\_\_ in this research is based on thorough experiments.
8. It is very easy for me to follow the lessons on the techniques of the \_\_\_\_\_ with oil colors.
9. He handled the difficult situation with his \_\_\_\_\_ and maturity.
10. There are 100 \_\_\_\_\_ in a meter.

### Exercise 5-9: Discipline-specific vocabulary II

**Directions:** Choose 5 words from the list creating your own sentence.

*anatomy / centimeters / defendant / hypothesis / intelligence / impressionism / lyrics / metaphor / revenue / synonym*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### Exercise 5-10: Reading and vocabulary

**Directions:** Read the following paragraph and use your knowledge of roots to identify the meaning of each of the word in boldfaced type. Use a dictionary if necessary.

The first step to **improvement** is always self-awareness. Analyze your shortcomings as a listener and commit yourself to **overcoming** them. Good listeners are not born that way. They have worked at learning how to listen **effectively**. Good listening does not go hand in hand with intelligence, **education**, or **social** standing. Like any other skill, it comes from practice and self-discipline. You should begin to think of listening as an active process. So many aspects of modern life **encourage** us to listen **passively**. We “listen” to the radio while studying or “listen” to the television while moving about from room to room. This type of passive listening is a habit—but so is active listening. We can learn to **identify** those situations in which active listening are important. If you woke seriously at becoming a more efficient listener, you will reap the rewards in you schoolwork, in your **personal** and family **relations**, and in your career. (Langan, 2013, p. 131)

1. improvement: \_\_\_\_\_
2. overcoming: \_\_\_\_\_
3. effectively: \_\_\_\_\_
4. education: \_\_\_\_\_
5. social: \_\_\_\_\_
6. encourage: \_\_\_\_\_
7. passively: \_\_\_\_\_

8. identify: \_\_\_\_\_
9. personal: \_\_\_\_\_
10. relations: \_\_\_\_\_

**Exercise 5-11: Create the sentences**

**Directions:** Write sentences using the words provided.

1. improvement: \_\_\_\_\_
2. overcoming: \_\_\_\_\_
3. effectively: \_\_\_\_\_
4. education: \_\_\_\_\_
5. social: \_\_\_\_\_
6. encourage: \_\_\_\_\_
7. passively: \_\_\_\_\_
8. identify: \_\_\_\_\_
9. personal: \_\_\_\_\_
10. relations: \_\_\_\_\_

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## **Appendices**

Appendix A: Academic Word List

Appendix B: Answer Key



## Appendix A

### Academic Word List

This academic word list is compiled from the Academic Word list (Coxhead, 2000), Academic Keyword List (Paquet, 2010) and New Academic Word List (Browne, Culligan & Phillips, 2013). The list includes the most frequent academic words which provide headword with its family for study or memorization. In addition, the words are arranged in alphabetical order and the most frequently used words are italicized and the list also shows both British and American English spelling.

	<b>Headwords</b>	<b>Other words in the family</b>
1	<i>abandon</i>	abandoned, abandoning, abandonment, abandons
2	abdominal	abdominals
3	ability	-
4	absence	-
5	absolute	-
6	absorb	absorbs, absorption, absorptions
7	<i>abstract</i>	abstraction, abstractions, abstractly, abstracts
8	above	-
9	academy	academia, <i>academic</i> , academically, academics, academies
10	accelerate	accelerates, accelerated, accelerating, acceleratings, acceleration, accerations
11	accent	accents
12	accept	acceptable
13	<i>access</i>	accessed, accesses, accessibility, accessible, accessing, inaccessible
14	accommodate	accommodated, accommodates, accommodating, <i>accommodation</i>
15	accompany	<i>accompanied</i> , accompanies, accompaniment, accompanying, unaccompanied
16	according to	-
17	accordingly	-
18	account	-
19	account (for)	-
20	accumulate	accumulated, accumulating, accumulatings, <i>accumulation</i> , accummulations, accumulates

	<b>Headwords</b>	<b>Other words in the family</b>
21	<i>accurate</i>	accuracy, accurately, inaccuracy, inaccuracies, inaccurate
22	<i>achieve</i>	achievable, achieved, achievement, achievements, achieves, achieving
23	acid	acids, acidic, acidics
24	acknowledge	<i>acknowledged</i> , acknowledges, acknowledging, acknowledgement, acknowledgements
25	acquire	acquired, acquires, acquiring, <i>acquisition</i> , acquisitions
26	act	action, active, actively, activity
27	activate	activates, activated,, activating, activatings
28	actual	-
29	acute	acutest
30	adapt	adaptability, adaptable, <i>adaptation</i> , adaptations, adapted, adapting, adaptive, adaptives, adapts
31	addition	additional
32	<i>adequate</i>	adequacy, adequately, inadequacies, inadequacy, inadequate, inadequately
33	<i>adjacent</i>	adjacents
34	adjust	adjusted, adjusting, <i>adjustment</i> , adjustments, adjusts, readjust, readjusted, readjusting, readjustment, readjustments, readjusts
35	<i>administration</i>	administrates, administrate, administrations, administrative, administratively, administrator, administrators
36	admission	admissions
37	adolescent	adolescents
38	adopt	adoption
39	adult	adulthood, <i>adults</i>
40	advance	advantage
41	adverse	-
42	advice	-
43	<i>advocate</i>	advocacy, advocated, advocates, advocating
44	<i>affect</i>	affected, affecting, affective, affectively, affects, unaffected
45	affirm	affirms, affirmed, affirming, affirmings

	<b>Headwords</b>	<b>Other words in the family</b>
46	afterward	afterwards
47	age	-
48	<i>aggregate</i>	aggregated, aggregates, aggregating, aggregatings, aggregation
49	agriculture	agricultures
50	<i>aid</i>	aided, aiding, aids, unaided
51	aim	-
52	<i>airplane</i>	airplanes, aeroplane, aeroplanes
53	<i>albeit</i>	-
54	algebra	algebras
55	algorithm	algorithms
56	alien	aliens
57	alliance	alliances
58	allocate	allocated, allocates, allocating, allocatings, <i>allocation</i> , allocations
59	allow	-
60	also	-
61	<i>alter</i>	alterable, alteration, alterations, altered, altering, alternate, alternating, alters, unalterable, unaltered alternatively, alternatives
62	<i>alternative</i>	-
63	although	altitudes
64	altitude	aluminium
65	aluminum	ambiguities, ambiguity, unambiguous, unambiguously
66	<i>ambiguous</i>	amended, amending, <i>amendment</i> , amendments, amends
68	amino	-
69	amongst	-
70	amount	-
71	amplitude	amplitudes
72	an	-
73	analogy	analogies, <i>analogous</i>
74	analyse	analysed, analyser, analysers , analyse, analyzing, <i>analysis</i> , analytically ,analyze ,analyzed, analyzes, analyzing, analytic, analytical, analyst, analysts
75	ancestor	ancestors

	<b>Headwords</b>	<b>Other words in the family</b>
76	<i>annual</i>	annually
77	<i>anticipate</i>	<i>anticipated</i> , anticipates, anticipating, anticipation, unanticipated
78	<i>anthropology</i>	anthropologies
79	<i>anti</i>	antibiotic, antibiotics, antibody, antibody
80	<i>antiquity</i>	antiquites
81	<i>apparent</i>	apparently
82	<i>appear</i>	-
83	<i>append</i>	<i>appendix</i> , appended, appends, appending, appendices, appendixes
84	<i>applause</i>	-
85	<i>apple</i>	apples
86	<i>applicable</i>	application
87	<i>apply</i>	-
88	<i>appreciate</i>	appreciable, appreciably, appreciated, appreciates, appreciating, <i>appreciation</i> , unappreciated
89	<i>approach</i>	approachable , approached, approaches, approaching, unapproachable
90	<i>appropriate</i>	appropriacy, appropriately, appropriateness, inappropriacy, inappropriate, inappropriate
91	<i>approximate</i>	<i>approximated</i> , approximately, approximates, approximating, approximatings, approximation, approximations
92	<i>arbitrary</i>	arbitrariness, arbitrarily
93	<i>archaeology</i>	achaeologies
94	<i>architect</i>	architects, architected, architecting, architectings
95	<i>area</i>	areas
96	<i>argue</i>	argument
97	<i>assess</i>	assessable, assessed , assesses, assessing, <i>assessment</i> , assessments, reassess, reassessed, reassessing, reassessment, unassessed
98	<i>arise</i>	-
99	<i>array</i>	arrays, arrayed, arraying, arrayings
100	<i>arrow</i>	arrows, arrowed, arrowing, arrowings
101	<i>articulate</i>	articulates, articulated, articulating, articulatings
102	<i>artifact</i>	artifacts, artifact, artefact, artefacts
103	<i>artificial</i>	artificials

	<b>Headwords</b>	<b>Other words in the family</b>
104	artistic	artistics
105	artwork	artworks
106	as	-
107	as opposed to	-
108	as to	-
109	as well as	-
110	aspect	<i>aspects</i>
111	assemble	assembled, assembles, assemblies, assembling, <i>assembly</i>
112	assert	asserts, asserted, asserting, assertings, assertion
113	assign	<i>assigned</i> , assigning, assignment, assignments, assigns, reassign, reassigned, reassigning, reassigns, unassigned
114	assist	<i>assistance</i> , assistant, assistants, assisted, assisting, assists, unassisted
115	associate	association
116	<i>assume</i>	assumed, assumes, assuming, assumption, assumptions
117	assure	<i>assurance</i> , assurances, assured, assuredly, assures, assuring
118	at best	-
119	athletic	athletics
120	atom	atoms, atomic, atomics
121	attach	<i>attached</i> , attaches, attaching, attachment, attachments, unattached
122	attain	attainable, <i>attained</i> , attaining, attainment, attainments, attains, unattainable
123	attempt	-
124	attend	attention
125	attitude	<i>attitudes</i>
126	attribute	attributable, <i>attributed</i> , attributes, attributing, attribution
127	auction	auctions, auctioned, auctioning, auctionings
128	audio	-
129	audit	audits, audited, auditing, auditings
130	<i>author</i>	authored, authoring, authors, authorship
131	<i>authority</i>	authoritative, authorities

	<b>Headwords</b>	<b>Other words in the family</b>
132	automate	automatic, automated, automates, automating, <i>automatically</i> , automation
133	autonomy	autonomies
134	<i>available</i>	availability, availabilities, unavailable
135	average	-
136	avoid	-
137	<i>aware</i>	awareness, unaware
138	axiom	axioms
139	axis	-
140	backward	backwards
141	bacteria	bacterial, bacteria
142	balance	-
143	bang	bangs, banged, banging, bangings
144	bargain	bargains, bargained, bargaining, bargainings
145	barrel	barrels, barrelled, barrelling, barrellings, barreled, barreling
146	base	-
147	basic	basically
	basin	basins, basined
148	basis	-
149	bat	bats, batted, batting, battings
150	be	being
151	beam	beams, beamed, beaming, beamings
152	because	-
153	because of	-
154	become	-
155	<i>behalf</i>	-
156	behavioral	behavioural, behaviour
157	belief	-
158	<i>benefit</i>	beneficial, beneficiary, beneficiaries, benefited, benefiting, benefits
159	between	-
160	<i>bias</i>	biased, biases, biasing, unbiased
161	bilingual	bilinguals
162	binary	binarys, binaries
163	biology	biologies, biodiversity

	<b>Headwords</b>	<b>Other words in the family</b>
164	birth	-
165	bizarre	-
166	blank	blanks, blanked, blanking, blanker
167	bleed	bleeds, bled, bleeding, bleedin
168	bodily	-
169	<i>bond</i>	bonded, bonding, bonds
170	bonus	bonuses
171	both	-
172	bound	bounds, bounded, bounding, boundings
173	bracket	brackets, bracketed, bracketted
174	breakdown	breakdowns
175	<i>brief</i>	brevity, briefed, briefing, briefly, briefs
176	broadly	-
177	bubble	bubbles, bubbled, bubbling, bubblings
178	bucket	buckets
179	<i>bulk</i>	bulks, bulked, bulking, bulkings, bulky
180	bullet	bullets
181	bundle	bundles, bundled, bundling, bundlings
182	by	-
183	calcium	-
184	calculation	calculations
185	calculator	calculators
186	calculus	-
187	campus	campuses
188	can	-
189	candidate	candidates
190	capillary	capillaries
191	capitalism	capitalisms
192	capitalist	capitalists
193	carrier	carriers
194	cattle	-
195	<i>capable</i>	capabilities, capability, incapable
196	<i>capacity</i>	capacities, incapacitate, incapacitated
197	case	-

	<b>Headwords</b>	<b>Other words in the family</b>
198	category	<i>categories</i> , categorization, categorise, categorised, categorises, categorising, categorization, categorized, categorizes, categorizing
199	cause	-
200	cease	ceased, ceaseless, <i>ceases</i> , ceasing
201	censor	censors, censored, censoring, censorings
202	central	-
203	centre	-
204	certain	-
205	<i>challenge</i>	challenged, challenger, challengers, challenges, challenging
206	change	-
207	<i>channel</i>	channeled, channeling, channels
208	<i>chapter</i>	chapters
209	character	characterize, characteristic, characterization, characterizations, characterisation, characterisations
210	<i>chart</i>	charted, charting, charts, uncharted
211	cheat	cheats, cheated, cheating, cheatings
212	cheer	Cheers, cheered, cheering, cheerings
213	<i>chemical</i>	chemically, chemicals, chemistry, chemistries
214	chemotherapy	chemotherapies
215	chess	-
216	chloride	chlorides
217	choice	-
218	choose	-
219	chromosome	chromosomes
220	chronic	chronics
221	chunk	chunks, chunked, chunking, chunkings
222	cinema	cinemas
223	circa	-
224	circulate	circulates, circulated, circulating, circulatings, circulation, circulations
225	circumstance	<i>circumstances</i>
226	cite	citation, citations, <i>cited</i> , citing, cites
227	<i>civil</i>	civilization, civilizations, civilisation, civilisations
228	claim	-

	<b>Headwords</b>	<b>Other words in the family</b>
229	clarify	clarification, clarified, clarifies, clarifying, clarifyings, <i>clarity</i>
230	class	-
231	classic	<i>classical</i> , classics, classify, classifies, classified, classifying, classifying, classification, classifications
232	classroom	classrooms
233	<i>clause</i>	clauses
234	clay	clays
235	clear	clearly
236	clever	cleverer, cleverest
237	click	clicks, clicked, clicking, clickings
238	client	clients
239	clinic	clinics
240	clip	clips, clipped, clipping, clippings
241	clone	clones, cloned, cloning, clonings
242	closely	-
243	closure	closures
244	clue	clues, clued, cluing, cluings
245	coefficient	coefficients
246	<i>code</i>	coded, codes, coding
247	cognitive	-
248	coherent	<i>coherence</i> , coherently, incoherent, incoherently
249	<i>coincide</i>	coincided, coincides, coinciding, coincidence, coincidences, coincident, coincidental
250	<i>collapse</i>	collapsed, collapses, collapsible, collapsing
251	colleague	<i>colleagues</i>
252	collective	collectives
253	colony	colonies, colonial, colonials
254	combine	combination
255	comma	commas
256	commence	<i>commenced</i> , commences, commencement, commencing, recommences, recommenced, recommencing
257	comment	commentaries, commentary, commentator, commentators, commented, commenting, <i>comments</i>

	<b>Headwords</b>	<b>Other words in the family</b>
258	<i>commission</i>	commissioned, commissioner, commissioners, commissioning, commissions
259	commit	<i>commitment</i> , commitments, commits, committed, committing
260	committee	-
261	<i>commodity</i>	commodities
262	common	commonly
263	communicate	communicable, communicated, communicates, communicating <i>communication</i> , communications, communicative, communicatively, uncommunicative
264	communist	communists
265	<i>community</i>	communities
266	compact	compacts, compacted, compacting, compacter
267	compatible	compatibility, incompatibility, <i>incompatible</i>
268	compare	comparison, comparable, comparables, comparative, comparatives
269	compensate	compensated, compensates, compensating, compensatings, <i>compensation</i> , compensations, compensatory
270	compete	competitive, competence, competences, competent
271	compile	compilation, compilations, <i>compiled</i> , compiles, compiling
272	<i>complement</i>	complementary, complemented, complementing, complementings, complements
273	complete	-
274	<i>complex</i>	complexities, complexity
275	complication	complications
276	comply	complies, complied, complying, complyings
277	composer	composers
278	composite	-
279	component	componentry, <i>components</i>
280	compound	compounded, compounding, <i>compounds</i>
281	<i>comprehensive</i>	comprehensively, comprehension
282	<i>comprise</i>	comprised, comprises, comprising
283	compromise	-

	<b>Headwords</b>	<b>Other words in the family</b>
284	compute	computation, computational, computations, computable, <i>computer</i> , computed, computerised, computers, computing
285	conceive	conceivable, conceivably, <i>conceived</i> , conceives, conceiving, conceivings, inconceivable, inconceivably
286	concentrate	concentrated, concentrates, concentrating, <i>concentration</i>
287	<i>concept</i>	conception, conceptions, concepts, conceptual, conceptuals, conceptualisation, conceptualise, conceptualised, conceptualises, conceptualising, conceptually
288	concern	-
289	conclude	concluded, concludes, concluding, <i>conclusion</i> , conclusions, conclusive ,conclusively, inconclusive, inconclusively
290	<i>concurrent</i>	concurrently
291	condition	conditional, conditinals
292	<i>conduct</i>	conducted, conducting, conducts, conduction
293	cone	cones
294	confer	<i>conference</i> , conferences, conferred, conferring, confers
295	configuration	configurations
296	confine	<i>confined</i> , confines, confining, confinings, unconfined
297	confirm	confirmation, <i>confirmed</i> , confirming, confirms
298	<i>conflict</i>	conflicted, conflicting, conflicts
299	conform	conformable, conformability, conformance, conformation, conformed, conforming, conformist, conformists, <i>conformity</i> , conforms, nonconformist, nonconformists, nonconformity, non-conformist, non-conformists, non-conformity
300	confound	confounds, confounded, confounding, confoundings
301	congruent	-
302	connect	connector, connectors
303	connotation	connotations
304	conscious	consciousness, consciousnesses

	<b>Headwords</b>	<b>Other words in the family</b>
305	<i>consent</i>	consensus, consented, consenting, consentings, consent, consents
306	conserve	conserves, conserved, conserving, conservings, conservation, conservations
307	consequent	consequence, <i>consequences</i> , consequently
308	consider	-
309	<i>considerable</i>	considerably, consideration
310	consist	consisted, consistency, <i>consistent</i> , consistently, consisting, consists, inconsistencies, inconsistency, inconsistent
311	<i>constant</i>	constancy, constantly, constants, inconstancy, inconstantly
312	constitute	constituencies , constituency, constituent, constituents, constituted, constitutes, constituting, constitution, constitutions, <i>constitutional</i> , constitutionally, constitutive, unconstitutional
313	constrain	constrained, constraining, constrainings, constrains, constraint, <i>constraints</i> , unconstrained
314	construct	constructed, constructing, <i>construction</i> , constructions, constructive, constructs, reconstruct, reconstructed, reconstructing, ,econstructings, reconstruction, reconstructs
315	consonant	consonants
316	consult	consultancy, consultant, consultants, <i>consultation</i> , consultations, consultative, consulted, consults, consulting
317	consume	consumed, <i>consumer</i> , consumers, consumes, consuming, consumption, consumptions
318	<i>contact</i>	contactable, contacted, contacting, contacts
319	contain	container, containers
320	content	-
321	continent	continents
322	continuity	continuities
323	contour	contours, contoured, contouring, coutourings
324	<i>contemporary</i>	contemporaries
325	<i>context</i>	contexts, contextual, contextualise, contextualised, contextualising, uncontextualised, contextualize, contextualized, contextualizing, uncontextualized

	<b>Headwords</b>	<b>Other words in the family</b>
326	<i>contract</i>	contracted, contracting, contractor, contractors, contracts
327	<i>contradict</i>	contradicted, contradicting, contradictings, <i>contradiction</i> , contradictions, contradictory, contradicts
328	<i>contrary</i>	contrarily, contraries, contrary to
329	<i>contrast</i>	contrasted, contrasting, contrastive, contrasts
330	<i>contribute</i>	contributed, contributes, contributing, <i>contribution</i> , contributions, contributor, contributors
331	<i>control</i>	-
332	<i>controversy</i>	controversies, controversial, controversially, uncontroversial
333	<i>convene</i>	<i>convention</i> , convenes, convened, convening, conventional, conventionally, conventions, unconventional
334	<i>converge</i>	converges, converged, converging, convergings, convergence, convergences
335	<i>converse</i>	<i>conversely</i>
336	<i>convert</i>	conversion, conversions, <i>converted</i> , convertible, converting, converts
337	<i>convince</i>	<i>convinced</i> , convinces, convincing, convincingly, unconvined
338	<i>cooperate</i>	cooperated, cooperates, cooperating, cooperation, <i>cooperative</i> , cooperatively, co-operate, co-operated, co-operates, co-operation, co-operative, co-operatively
339	<i>coordinate</i>	coordinated, coordinates, coordinating, coordinatings, <i>coordination</i> , coordinations, coordinator, coordinators, co-ordinate, co-ordinated, co-ordinates, co-ordinating, co-ordination, co-ordinator, co-ordinators
340	<i>cord</i>	cords, corded, cording, cordings
341	<i>core</i>	cores, coring, cored
342	<i>coronary</i>	-
343	<i>corporate</i>	corporates, corporation, corporations
344	<i>corpus</i>	-
345	<i>correct</i>	correctly, correction, corrections
346	<i>correlate</i>	correlates, correlated, correlating, correlatings, correlation, correlations

	<b>Headwords</b>	<b>Other words in the family</b>
347	correspond	corresponded, correspondence, correspondences, <i>corresponding</i> , correspondingly, corresponds
348	corruption	corruptions
349	cortex	cortexes
350	cortices	-
351	country	-
352	<i>couple</i>	coupled, coupling, couples
353	<i>create</i>	created, creates, creating, creation, creations, creative, creatively, creativity, creator, creators, recreate, recreated, recreates, recreating
354	<i>credit</i>	credited, crediting, creditor, creditors, credits, credibility
355	crisis	-
356	critical	critically
357	criticism	-
358	<i>criteria</i>	criterion
359	critique	critiques, critiqued, critiquing, critiquings
360	<i>crucial</i>	crucially
361	crude	cruder, crudest
362	crystal	crystals
363	cue	cures, cued, cueing, cueings
364	cure	cures, cured, curing, curings
365	culture	<i>cultural</i> , culturally, cultured, cultures, uncultured
366	<i>currency</i>	currencies
367	curriculum	curriculums, curricula
368	<i>cycle</i>	cycled, cycles, cyclic, cyclics, cyclical, cycling
369	cylinder	cylinders
370	damage	-
371	damp	damps, damped, damping, dampings, dampest
372	<i>data</i>	-
373	deadline	deadlines
374	deal	-
375	<i>debate</i>	debatable, debated, debates, debating
376	decade	<i>decades</i>
377	decay	decays, decayed, decaying, decayings
378	deceive	deceives, deceived, deceiving, deceivings

	<b>Headwords</b>	<b>Other words in the family</b>
379	decision	-
380	<i>decline</i>	declined, declines, declining
381	deduce	deduced, deduces, deducing, <i>deduction</i> , deductions
382	defect	defects, defected, defecting, defectings
383	defence	-
384	deficiency	deficiencies
385	define	definable, defined, defines, defining, <i>definition</i> , definitions, redefine, redefined, redefines, redefining, undefined
386	<i>definite</i>	definitely, definitive, definition, indefinite, indefinitely
387	deflection	deflections
388	degrade	degrades, degraded, degrading, degradings
389	degree	-
390	deliberately	-
391	delta	deltas
392	demand	-
393	<i>demonstrate</i>	demonstrable, demonstrably, demonstrated, demonstrates, demonstrating, demonstration, demonstrations, demonstrative, demonstratively, demonstrator, demonstrators
394	<i>denote</i>	denotation, denotations, denoted, denotes, denoting, denotings
395	dense	denser, densest
396	<i>deny</i>	deniable, denial, denials, denied, denies, denying, undeniable
397	depend	dependent, depending on, dependence, dependences
398	depict	depicts, depicted, depicting, depictings
399	depress	depressed, depresses, depressing, <i>depression</i>
400	derive	derivation, derivations, derivative, derivatives, <i>derived</i> , derives, deriving
401	<i>design</i>	designed, designer, designers, designing, designs
402	<i>despite</i>	-
403	descendent	descendents
404	describe	-
405	descriptor	descriptors, description
406	destination	destinations

	<b>Headwords</b>	<b>Other words in the family</b>
407	destroy	-
408	destruction	-
409	detailed	-
410	detect	detectable, <i>detected</i> , detecting, detection, detections, detective, detectives, detector, detectors, detects
411	determine	determination
412	develop	developmental, developmental, developing, developed, underdeveloped
413	deviate	deviated, deviates, deviating, <i>deviation</i> , deviations
414	<i>device</i>	devices
415	devote	<i>devoted</i> , devotedly, devotees, devoting, devotion, devotions
416	diagnose	diagnoses, diagnosed, diagnosing, diagnosings, diagnosis
417	diagnostic	diagnostics
418	diagram	diagrams, diagramed, diagraming, diagramings
419	dialect	dialects
420	diameter	diameters
421	diary	diaries
422	dictate	dictates, dictated, dictating, dictatings, dictionary, dictionaries
423	differ	difference, different
424	differentiate	differentials, differentiated, differentiates, differentiating, differentiatings, <i>differentiation</i> , differentiations
425	difficult	difficulty
426	diffusion	diffusions
427	dilemma	dilemmas
428	dilute	dilutes, diluted, diluting, diluting, dilutings
429	dimension	dimensional, dimensionals, <i>dimensions</i> , multidimensional
430	diminish	<i>diminished</i> , diminishes, diminishing, diminution, undiminished
431	dioxide	dioxides
432	direct	directly, directive, directives
433	disability	disabilities

	<b>Headwords</b>	<b>Other words in the family</b>
434	disadvantage	disadvantages, disadvantaged, disadvantaging, disadvantagings
435	discharge	discharges, discharged, discharging, dischargings
436	discrete	discretely, <i>discretion</i> , discretionary, indiscrete, indiscretion
437	discriminate	discriminated, discriminates, discriminating, <i>discrimination</i> , discriminations
438	discourse	discourses, discoursed, discoursing, discoursings
439	discovery	-
440	discrimination	-
441	discuss	discussion
442	displace	displaced, <i>displacement</i> , displacements, displaces, displacing
443	display	displayed, displaying, displays
444	dispose	disposable, <i>disposal</i> , disposed, disposes, disposing
445	dissection	dissections
446	dissertation	dissertations
447	dissolve	dissolves, dissolved, dissolving, dissolvings
448	distinct	<i>distinction</i> , distinctions, distinctive, distinctively, distinctly, indistinct, indistinctly
449	distinguish	-
450	distort	<i>distorted</i> , distorting, distortion, distortions, distorts
451	distribute	distributed, distributing, <i>distribution</i> , distributional, distributions, distributive, distributor, distributors, redistribute, redistributed, redistributes, redistributing, redistribution
452	disturbance	disturbances
453	diverse	diversely, diversification, diversified, diversifies, diversify, diversifying, <i>diversity</i>
454	divide	-
455	division	-
456	<i>document</i>	documentation, documented, documenting, documents
457	doctrine	-
458	<i>domain</i>	domains
459	<i>domestic</i>	domestically, domesticate, domesticated, domesticating, domestics

	<b>Headwords</b>	<b>Other words in the family</b>
460	dominate	dominance, dominances, <i>dominant</i> , dominated, dominates, dominating, domination, dominations
461	donor	donors
462	dose	doses, dosed, dosing, dosings
463	<i>draft</i>	drafted, drafting, drafts, redraft, redrafted, redrafting, redrafts
464	drain	drains, drained, draining, drainings
465	drama	dramas, <i>dramatic</i> dramatically, dramatise, dramatised, dramatising, dramatises, dramatisation, dramatisations, dramatist, dramatists, dramatization dramatizations, dramatize, dramatized, dramatizes, dramatizing
466	drift	drifts, drifted, drifting, drift in
467	due to	-
468	<i>duration</i>	durations
469	during	-
470	<i>dynamic</i>	dynamically, dynamics
471	dye	dyes, dyed, dyeing, dyeings
472	e.g.	-
473	each	-
474	early	-
475	ecology	ecologies, ecological, ecologicals
476	economy	<i>economic</i> , economical, economically , economics, economies, economist, economists, uneconomical
477	edit	edited, editing, <i>edition</i> , editions, editor, editorial, editorials, editors, edits
478	effect	effective, effectively, effectiveness
479	either	-
480	elaborate	elaborates, elaborated, elaborating, elaboratings
481	elastic	elastics, elasticity, elasticities
482	electron	electrons
483	element	<i>elements</i> , elementary
484	elevate	elevates, elevated, elevating, elevatings, elevation, elevations
485	<i>eliminate</i>	eliminated, eliminates, eliminating, elimination, eliminations
486	elite	elites, elite, elites

	<b>Headwords</b>	<b>Other words in the family</b>
487	<i>embed</i>	embeds, embedded, embedding, embeddings
488	<i>emerge</i>	<i>emerged</i> , emergence, emergences, emergent, emerges, emerging
489	<i>emission</i>	emissions
490	<i>emit</i>	emits, emitted, emitting, emittings
491	<i>emperor</i>	emperors
492	<i>emphasis</i>	emphasise, emphasized, emphasising, emphasize, emphasized, emphasizes, emphasizing, emphatic, emphatically
493	<i>empirical</i>	empirically, empiricism, empiricals
494	<i>employ</i>	-
495	<i>enable</i>	enabled, enables, enabling
496	<i>encode</i>	encodes, encoded, encoding, encodings
497	<i>encounter</i>	<i>encountered</i> , encountering, encounters
498	<i>encourage</i>	-
499	<i>energy</i>	energetic, energetically, energies
500	<i>enforce</i>	enforced, <i>enforcement</i> , enforcements, enforces, enforcing
501	<i>enhance</i>	<i>enhanced</i> , enhancement, enhances, enhancing
502	<i>enormous</i>	enormity, enormously
503	<i>ensure</i>	ensured, ensures, ensuring
504	<i>entity</i>	<i>entities</i>
505	<i>entrant</i>	entrants
506	<i>environment</i>	environmental, environmentalist, environmentalists, environmentally, environments
507	<i>enzyme</i>	enzymes
508	<i>epidemic</i>	epidemics
509	<i>epidemiology</i>	epidemiologies
510	<i>equal</i>	equality, equalities
511	<i>equate</i>	equated, equates, equating, <i>equation</i> , equations
512	<i>equilibrium</i>	-
513	<i>equip</i>	<i>equipment</i> , equipped, equipping, equips
514	<i>equivalent</i>	equivalence, equivalences
515	<i>erase</i>	erases, erased, erasing, erasings
516	<i>erode</i>	eroded, erodes, eroding, <i>erosion</i>
517	<i>error</i>	erroneous, erroneously, errors

	<b>Headwords</b>	<b>Other words in the family</b>
518	especially	-
519	essence	esses, essential, essentially
520	establish	disestablish, disestablished, disestablishes, disestablishing, disestablishment, <i>established</i> , establishes, establishing, establishment, establishments
521	<i>estate</i>	estates
522	<i>estimate</i>	estimated, estimates, estimating, estimation, estimations, over-estimate, overestimate, overestimated, overestimates, overestimating, underestimate, underestimated, underestimates, underestimating
523	ethic	<i>ethical</i> , ethical, ethically, ethics, unethical
524	<i>ethnic</i>	ethnicity
525	evaluate	evaluated, evaluates, evaluating, <i>evaluation</i> , evaluations, evaluative, re-evaluate, re-evaluated, re-evaluates, re-evaluating, re-evaluation
526	event	-
527	even thought	-
528	eventual	eventuality, <i>eventually</i>
529	evident	evidenced, <i>evidence</i> , evidential, evidently, evidents
530	evolve	<i>evolution</i> , evolved, evolving, evolves, evolutionary, evolutionist, evolutionists
531	ex	exes
532	examine	examination
533	example	-
534	<i>exceed</i>	exceeded, exceeding, exceeds
535	exception	-
536	excessive	-
537	exclude	<i>excluded</i> , excludes, excluding, exclusion, exclusionary, exclusionist, exclusions, exclusive, exclusively
538	execute	executes, executed, executing, executings, execution, executions
539	exemplify	-
540	<i>exhibit</i>	exhibited, exhibiting, exhibition, exhibitions, exhibits
541	exit	exits, exited, exiting, exitings, existence

	<b>Headwords</b>	<b>Other words in the family</b>
542	expand	expanded, expanding, expands, <i>expansion</i> , expansionism, expansive
543	<i>expert</i>	expertise, expertises, expertly, experts
544	experience	-
545	experiment	experimental
546	explain	explanation
547	<i>explicit</i>	explicitly
548	exploit	<i>exploitation</i> , exploited, exploiting, exploitings, exploits
549	exponential	exponentials
550	<i>export</i>	exported, exporter, exporters, exporting, exports
551	expose	exposed, exposes, exposing, <i>exposure</i> , exposures
552	express	-
553	extend	extensive, extent
554	<i>external</i>	externalisation, externalise, externalised, externalises, externalising, externality, externalization, externalize, externalized, externalizes, externalizing, externally
556	<i>extract</i>	extracted, extracting, extraction, extracts
557	extreme	extremely
558	fabric	fabrics
559	facet	facets, faceted, facetting, facetings
560	<i>facilitate</i>	facilitated, facilitates, facilities, facilitating, facilitatings, facilitation, facilitator, facilitators, facility
561	fact	-
562	factor	factored, factoring, <i>factors</i>
563	factorial	factorials
564	faculty	faculties
565	fail	failure
566	fairly	-
567	far	-
568	fatigue	fatigues, fatigued, fatiguing, fatiguings
569	favour	favorable
570	feature	featured, <i>features</i> , featuring
571	<i>federal</i>	federation, federations
572	fee	<i>fees</i>

	<b>Headwords</b>	<b>Other words in the family</b>
573	feedback	feedbacks
574	female	-
575	fertility	-
576	fetal	fetals
577	fever	fevers, fevered
578	fewer	-
579	fiber	fibers, fibres, fibre
580	figure	-
581	<i>file</i>	filed, files, filing
582	fin	fins, finned, finning, finnings
583	<i>final</i>	finalise, finalised, finalises, finalising, finalize, finalized, finalizes, finalizing, finality, finally, finals
584	finance	financed, finances, <i>financial</i> , financially, financier, financiers, financing
585	finding	-
586	<i>finite</i>	infinite, infinitely
587	first	-
588	fixed	-
589	flesh	fleshes, fleshed, fleshing, fleshings
590	flexible	<i>flexibility</i> , flexibilities, inflexible, inflexibility
591	flip	flips, flipped, flipping, flippings
592	fluctuate	fluctuated, fluctuates, fluctuating, fluctuation, <i>fluctuations</i>
593	fluid	fluids
594	flux	fluxes, fluxed, fluxing, fluxings
595	<i>focus</i>	focused, focuses, focusing, focussed, focussing, refocus, refocused refocuses, refocusing, refocussed, refocusses, refocussing
596	footnote	footnotes, footnoted, footnoting, footnotings
597	follow	following
598	for	for example, for instance
599	force	-
600	form	formal, formally, formation, formulate
601	<i>format</i>	formatted, formatting, formats

	<b>Headwords</b>	<b>Other words in the family</b>
602	<i>formula</i>	formulae, formulas, formulate, formulated, formulating, formulation, formulations, reformulate, reformulated, reformulating, reformulation, reformulations
603	forum	forums, fora
604	<i>forthcoming</i>	-
605	fossil	Fossils
606	found	finds, <i>founder</i> , founders, founding, foundings, unfounded
607	<i>foundation</i>	foundations
608	fraction	fractions
609	fracture	fractures, fractured, fracturing, fracturings
610	<i>framework</i>	frameworks
611	freely	-
612	frequent	frequently
613	friction	frictions
614	fringe	fringes, fringed, fringing, fringings
615	from	-
616	fully	-
617	<i>function</i>	functional, functionally, functioned, functioning, functions
618	fund	funded, funder, funders, funding, <i>funds</i>
619	<i>fundamental</i>	fundamentally
620	fungus	fungi
621	further	-
622	<i>furthermore</i>	-
623	fusion	fusions
624	future	-
625	gain	-
626	gauge	gauges, gauged, gauging, gaugings, gage, gages
627	<i>gender</i>	genders
628	general	generally
629	generalization	<i>generalizations, generalisation, generalisations</i>
630	generalize	generalizes, generalized, generalizing, generalize, generalizes, generalised
631	generate	<i>generated, generates, generating</i>
632	<i>generation</i>	generations

	<b>Headwords</b>	<b>Other words in the family</b>
633	genetically	-
634	genetics	-
635	ghost	ghosts, ghosted, ghosting, ghostings
636	given that	-
637	globe	<i>global</i> , globally, globalisation, globalisations, globalization, globalizations
638	goal	<i>goals</i>
639	goat	goats
640	goodness	-
641	goods	-
642	govern	-
643	<i>grade</i>	graded, grades, grading
644	gradient	gradients
645	gram	grams
646	grammatical	grammaticals
647	grant	<i>granted</i> , granting, grants
648	graph	graphs, graphed, graphing, graphings
649	grasp	grasp
650	gravity	gravities
651	great	greatly
652	grid	grids
653	gross	grosses, grossed, grossing, grosser, grossest
654	group	-
655	growth	-
656	<i>guarantee</i>	guaranteed, guaranteeing, guarantees
657	guidance	-
658	guideline	<i>guidelines</i>
659	gut	guts, gutted, gutting, guttings
660	habitat	habitats
661	halfway	halfways
662	handout	handouts
663	harvest	harvests, harvested, harvesting, harvestings
664	hawk	hawks, hawked, hawking, hawkings
665	headquarter	headquarters, headquartered, headquartering, headquarterings

	<b>Headwords</b>	<b>Other words in the family</b>
666	hedge	hedges, hedged, hedging, hedgings
667	helix	helixes, helices
668	<i>hence</i>	-
669	hepatitis	-
670	herbicide	herbicides
671	hierarchy	<i>hierarchical</i> , hierarchies
672	high	highly
673	highlight	<i>highlighted</i> , highlighting, highlights
674	hip	hips, hipped
675	historically	-
676	homework	homeworks
677	horizon	horizons, horizontal, horizontals
678	hormone	hormones
679	however	-
680	human	-
681	hydrogen	hydrogens
682	<i>hypothesis</i>	hypotheses, hypothesise, hypothesised, hypothesises, hypothesising, hypothesize, hypothesized, hypothesizes, hypothesizing, hypothetical, hypothetically
683	idea	-
684	ideal	-
685	<i>identical</i>	identicals, identically
686	identify	identifiable, identification, identifications, <i>identified</i> , identifies, identifying, identities, identity, unidentifiable
687	<i>ideology</i>	ideological, ideologically, ideologies
688	ignorant	ignorance, ignore, <i>ignored</i> , ignores, ignoring
689	illusion	illusions
690	illustrate	<i>illustrated</i> , illustrates, illustrating, illustration, illustrations, illustrative
691	<i>image</i>	imagery, images
692	immediate	-
693	immigrate	immigrant, immigrants, immigrated, immigrates, immigrating, <i>immigration</i>
694	immune	-

	<b>Headwords</b>	<b>Other words in the family</b>
695	<i>impact</i>	impacted, impacting, impactings, impacts
696	implement	<i>implementation</i> , implemented, implementing, implements
697	implicate	implicated, implicates, implicating, implication, <i>implications</i>
698	<i>implicit</i>	implicitly
699	imply	implied, <i>implies</i> , implying
700	importance	important, importantly
701	impulse	impulses
702	impose	<i>imposed</i> , imposes, imposing, imposition
703	improve	improvement
704	in	-
705	in addition to	-
706	in common with	-
707	in favour of	-
708	in general	-
709	in particular	-
710	in relation to	-
711	in response to	-
712	in terms of	-
713	in that	-
714	in the light of	-
715	<i>incentive</i>	incentives
716	<i>incidence</i>	incidences, incident, incidentally, incidents
717	incline	<i>inclination</i> , inclinations, inclined, inclines, inclining, inclinings
718	include	including
719	inclusion	inclusions
720	incredible	incredibles
721	independently	-
722	<i>income</i>	incomes
723	incomplete	-
724	incorporate	<i>incorporated</i> , incorporates, incorporating, incorporation
725	increase	increasingly
726	indeed	-

	<b>Headwords</b>	<b>Other words in the family</b>
727	indefinite	indefinitely
728	independent	independently
729	<i>index</i>	indexed, indexes, indexing
730	<i>indicate</i>	indicated, indicates, indicating, indication, indications, indicative, indicator, indicators
731	indifference	indifferences
732	indigenous	-
733	indirect	indirects, indirectly
734	<i>individual</i>	individualized, individuality, individualism, individualist, individualists, individualistic, individually, individuals
735	induce	<i>induced</i> , induces, inducing, inducings, induction, inductions
736	industrialize	industrializes, industrialized, industrializing, industrialise, industrialises, industrialised, industrialization, industrializations, industrialisation, industrialisations
737	inevitable	inevitability, <i>inevitably</i>
738	infect	infects, infected, infecting, infectings, infectious
739	infer	inference, inferences, <i>inferred</i> , inferring, infers
740	inferior	inferiors
741	infinity	infinities, infinitys
742	influence	influential, influentials
743	<i>infrastructure</i>	infrastructures
744	informal	informals
745	information	-
746	<i>inherent</i>	inherently
747	inhibit	inhibited, inhibiting, inhibitings, <i>inhibition</i> , inhibitions, inhibits
748	<i>initial</i>	initially
749	initiate	initiated, initiates, initiating, initiatings, initiation, initiations, initiative, <i>initiatives</i> , initiator, initiators
750	inject	injects, injected, injecting, injectings, injection, injections
751	injure	injured, injures, injuries, injuring, <i>injury</i> , uninjured
752	innate	-

	<b>Headwords</b>	<b>Other words in the family</b>
753	innovate	<i>innovation</i> , innovated, innovates, innovating, innovations, innovative, innovator, innovators
754	<i>input</i>	inputs
755	insect	insects
756	<i>insert</i>	inserted, inserting, insertings, insertion, inserts
757	insight	insightful, <i>insights</i>
758	inspect	inspected, inspecting, <i>inspection</i> , inspections, inspector, inspectors, inspects
759	instability	instabilities
760	<i>instance</i>	instances
761	instinct	instincts
762	integral	integrals
763	integration	integrations
764	intensity	intensities
765	intensive	-
766	<i>instance</i>	instances
767	<i>institute</i>	instituted, institutes, instituting, institution, institutional, institutionalise, institutionalised, institutionalises, institutionalising, institutionalized, institutionalizes, institutionalizing, institutionally, institutions
768	instruct	instruction, instructed, instructing, <i>instructions</i> , instructive, instructor, instructors, instructs
769	<i>integral</i>	-
770	integrate	integrated, integrates, integrating, <i>integration</i>
771	<i>integrity</i>	-
772	intelligent	<i>intelligence</i> , intelligently, unintelligent
773	<i>interval</i>	Intervals
774	intense	intensely, intension, intensification, intensified, intensifies, intensify, intensifying, intension, <i>intensity</i> , intensive, intensively
775	interact	interacted, interacting, interactings, <i>interaction</i> , interactions, interactive, interactively, interacts
776	interest	interesting, interestingly
777	interface	interfaces, interfaced, interfacing, interfacings
778	interfere	interferes, interfered, interfering, interferings

	<b>Headwords</b>	<b>Other words in the family</b>
779	<i>intermediate</i>	intermediates, intermediated, intermediating, intermediatings
780	<i>internal</i>	internalise, internalised, internalises, internalising, internalize, internalized, internalizes, internalizing internally
781	interpret	<i>interpretation</i> , interpretations, interpretative, interpreted, interpreting, interpretive, interprets, misinterpret, misinterpretation, misinterpretations, misinterpreted, misinterpreting, misinterprets, reinterpret, reinterpreted, reinterprets, reinterpreting, interpretation, reinterpretations interrupts, interrupted, interrupting, interruptings
782	interrupt	intervened, intervenes, intervening, intervenings, <i>intervention</i> , interventions
783	intervene	interviewer
784	interviewer	intrinsically
785	<i>intrinsic</i>	introduce
786	introduce	invades, invaded, invading, invadings
787	invade	invasions
788	invasion	inversions
789	inversion	inverts, inverted, inverting, invertings
790	invert	invested, investing, <i>investment</i> , investments, investor, investors, invests, reinvest, reinvested, reinvesting, reinvestment, reinvests
791	invest	investigated, investigates, investigating, <i>investigation</i> , investigations, investigative, investigator, investigators
792	investigate	<i>invoked</i> , invokes, invoking
793	invoke	<i>involved</i> , involvement, involves, involving, unininvolved
794	involve	ions
795	ion	irrigations
796	irrigation	<i>isolated</i> , isolates, isolating, isolation, isolationism
797	isolate	issued, <i>issues</i> , issuing
798	issue	itemization, itemise, itemised, itemises, itemising, <i>items</i>
799	item	-
800	its	-
801	itself	-

	<b>Headwords</b>	<b>Other words in the family</b>
802	jazz	jazzes, jazzed, jazzing, jazzings
803	<i>job</i>	jobs
804	<i>journal</i>	journals
805	junior	juniors
806	justify	justifiable, justifiably, <i>justification</i> , justifications, justified, justifies, justifying, unjustified
807	kind	-
808	kidney	kidneys
809	kilometer	kilometers, kilometres, kilometre
810	knowledge	-
811	lab	labs
812	<i>label</i>	labeled, labeling, labeled, labeling, labels
813	<i>labour</i>	labor, labored, labors, labored, laboring, labours
814	lack	-
815	large	largely
816	lateral	laterals
817	late	-
818	latter	-
819	<i>layer</i>	layered, layering, layers
820	layout	layouts
821	lead	leading
822	leaf	leafs, leafed, leafing, leafings
823	learning	-
824	<i>lecture</i>	lectured, lecturer, lecturers, lectures, lecturing
825	<i>legal</i>	illegal, illegality, illegally, legality, legally
826	legend	legends
827	legitimate	legitimates, legitimated, legitimating, legitimatings
828	legislate	legislated, legislates, legislating, <i>legislation</i> , legislative, legislator, legislators, legislature
829	leisure	leisures
830	less	-
831	level	-
832	lever	levers, levered, levering, leverings
833	<i>levy</i>	levies
834	lexical	lexicals
835	liable	liables

	<b>Headwords</b>	<b>Other words in the family</b>
836	<i>liberal</i>	liberalise, liberalism, liberalisation, liberalised, liberalises, liberalising, liberalization, liberalize, liberalized, liberalizes, liberalizing, liberate, liberated, liberates, liberation, liberations, liberating, liberator, liberators, liberally, liberals licences, license, licensed, licensing, licenses, unlicensed
837	<i>licence</i>	lifestyles
838	<i>lifestyle</i>	lifetimes
839	<i>lifetime</i>	likelihoods
840	<i>likelihood</i>	-
841	<i>likely</i>	-
842	<i>likewise</i>	-
843	<i>limb</i>	limbs, limbed
844	<i>limit</i>	limitation, limited
845	<i>linear</i>	linears
846	<i>linguistic</i>	lingusitics
847	<i>link</i>	linkage, linkages, linked, linking, links
848	<i>list</i>	-
849	<i>liter</i>	liters, litres, litre
850	<i>literature</i>	-
851	<i>little</i>	-
852	<i>liver</i>	livers
853	<i>locate</i>	located, locating, <i>location</i> , locations, relocate, relocated, relocates, relocating, relocation
854	<i>local</i>	locally
855	<i>locus</i>	locuses, loci
856	<i>logic</i>	illogical, illogically, logical, logicals, logically, logician, logicians
857	<i>loss</i>	-
858	<i>longitudinal</i>	longitudinals
859	<i>loop</i>	loops, looped, looping, loopings
860	<i>lump</i>	lumps, lumped, lumping, lumpings
861	<i>lung</i>	lungs
862	<i>machinery</i>	machineries
863	<i>main</i>	mainly
864	<i>Maintain</i>	maintained, maintaining, maintains, <i>maintenance</i>

	<b>Headwords</b>	<b>Other words in the family</b>
865	magnetic	magnetics
866	magnitude	magnitudes
867	<i>major</i>	majorities, majority
868	male	-
869	mall	malls
870	manipulate	manipulated, manipulates, manipulating, manipulatings, <i>manipulation</i> , manipulations, manipulative
871	mankind	-
872	manuscript	manuscripts
873	<i>manual</i>	manually, manuals
874	many	-
875	marble	marbles
876	margin	<i>marginal</i> , marginals, marginally, margins
877	marker	markers
878	marrow	marrows
879	material	-
880	maternal	maternals
881	mathematical	mathematics
882	<i>mature</i>	immature, immaturity, maturation, maturational, matured, matures, maturing, maturity
883	matrix	matrices, matrixes
884	maximise	max, maximise, maximised, maximises, maximising, maximisation, maximize, maximized, maximizes, maximizing, maximization, <i>maximum</i>
885	may	-
886	means	-
887	measure	-
888	meaningful	-
889	mechanic	mechanics, mechanical, mechanicals
890	<i>mechanism</i>	mechanisms
891	<i>media</i>	-
892	mediate	mediated, mediates, mediating, mediatings, <i>mediation</i>
893	<i>medical</i>	medically
894	<i>medium</i>	-

	<b>Headwords</b>	<b>Other words in the family</b>
895	member	-
896	membrane	membranes
897	memorize	memorizes, memorized, memorizing, memorise, memorises, memorised
898	<i>mental</i>	mentality, mentally
899	mentor	mentors, mentored, mentoring, mentorings
900	<i>method</i>	methodical, methodological, methodologies, methodology, methods
901	mercury	-
902	merge	merges, merged, merging, mergings
903	messenger	messengers
904	metabolism	metabolisms
905	metaphor	metaphors
906	micro	-
907	mid	-
908	migrate	migrant, migrants, migrated, migrates, migrating, migrations, <i>migration</i> , migratory
909	<i>military</i>	-
910	millimeter	millimeters, millimetres, millimetre
911	mineral	minerals
912	<i>minimal</i>	minimals, minimalisation, minimalise, minimalises, minimalised, minimalising, minimalist, minimalists, minimalistic, minimalization, minimalize, minimalized, minimalizes, minimalizing, minimally
913	minimise	<i>minimised</i> , minimises, minimising, minimize, minimized, minimizes, minimizing
914	<i>minimum</i>	-
915	<i>ministry</i>	ministered, ministering, ministerial, ministries
916	minus	minuses
917	minor	<i>minorities</i> , minority, minors
918	misleadings	-
919	missile	missiles
920	mobility	mobilities
921	<i>mode</i>	modes
922	model	-

	<b>Headwords</b>	<b>Other words in the family</b>
923	modern	-
924	modify	modification, modifications, <i>modified</i> , modifies, modifying, unmodified
925	mole	moles
926	molecular	moleculars
927	molecule	molecules
928	momentum	momentums, momenta
929	monetary	-
930	monitor	monitored, <i>monitoring</i> , monitors, unmonitored
931	monkey	monkeys, monkeyed, monkeying, monkeyings
932	monopoly	monopolies
933	morality	moralities
934	more	-
935	moreover	-
936	morphology	morphologies, morphological, morphologicals
337	most	-
938	mortality	mortalities
939	motif	motifs
940	motive	motivate, motivated, motivates, motivating, <i>motivation</i> , motivations, motives, unmotivated
941	movement	-
942	multi	-
943	multinational	multinationals
944	multiply	multiplies, multiplied, multiplying, multiplyings
945	mutation	mutations
946	<i>mutual</i>	mutually
947	myth	myths
948	naked	-
949	namely	-
950	nasty	nastier, nastiest
951	nationalism	nationalisms
952	natural	-
953	neat	neater, neatest
954	necessary	necessarily
955	necessity	necessities

	<b>Headwords</b>	<b>Other words in the family</b>
956	need	-
957	negate	<i>negative</i> , negated, negates, negating, negatively, negatives
958	neglect	-
959	neo	-
960	nest	nests, nested, nesting, nestings
961	<i>network</i>	networked, networking, networks
962	neural	neurals
963	neuron	neurons
964	<i>neutral</i>	neutrals, neutralisation, neutralise, neutralised, neutralises, neutralising, neutrality, neutralization, neutralize, neutralized, neutralizes, neutralizing
965	<i>nevertheless</i>	-
966	nicely	-
967	niche	niché, niches, nichés
968	nitrogen	nitrogens
969	noble	nobles, nobler, noblest
970	node	nodes
971	noisy	noisier, noisiest
972	norm	<i>norms</i>
973	normal	normally
974	nominal	nominals
975	non	-
976	<i>nonetheless</i>	-
977	nonlinear	nonlinears
978	norm	<i>norms</i>
979	<i>normal</i>	abnormal, abnormally, normalisation, normalise, normalised, normalises, normalising, normalization, normalize, normalized, normalizes, normalizing, normality, normally
980	notably	-
981	note	-
982	<i>notion</i>	notions
983	notation	notations
984	<i>notwithstanding</i>	-
985	novice	novices

	<b>Headwords</b>	<b>Other words in the family</b>
986	<i>nuclear</i>	-
987	nucleus	nuclei
988	null	nulls, nulled, nulling, nullings
989	number	numerical, numericals
990	nutrient	nutrients
991	<i>objective</i>	objectively, objectivity
992	objection	objecitons
993	obscure	obscures, obscured, obscuring, obscurings
994	observer	observers, observation
995	obtain	obtainable, <i>obtained</i> , obtaining, obtainings, obtains, unobtainable
996	<i>obvious</i>	obviously
997	occupy	occupancy, occupant, occupants, occupation, <i>occupational</i> , occupations, occupied, occupier, occupiers, occupies, occupying
998	<i>occur</i>	occurred, occurrence, occurrences, occurring, occurs, reoccur, reoccurred, reoccurring, reoccurs
999	<i>odd</i>	odds
1000	of	-
1001	<i>offset</i>	offsets, offsetting
1002	offspring	offsprings
1003	often	-
1004	<i>ongoing</i>	-
1005	only	-
1006	onset	onsets
1007	onwards	-
1008	operate	operation
1009	opportunity	-
1010	<i>option</i>	optional, options
1011	optical	opticlas
1012	optimal	optimals
1013	optimum	-
1014	or	-
1015	oral	orals
1016	organ	organs

	<b>Headwords</b>	<b>Other words in the family</b>
1017	organisation	-
1018	organism	organisms
1019	orient	orientate, orientated, orientates, <i>orientation</i> , orientating, oriented, orienting, orientings, orients, reorient, reorientation, reorientations
1020	original	originally
1021	oscillation	oscillations
1022	other	-
1023	other than	-
1024	outcome	<i>outcomes</i>
1025	outer	outers
1026	outlet	outlets
1027	outline	-
1028	<i>output</i>	outputs
1029	over	-
1030	<i>overall</i>	-
1031	overcome	-
1032	overhead	overheads
1033	<i>overlap</i>	overlapped, overlapping, overlappings, overlaps
1034	overview	overviews, overviewed, overviewing, overviewings
1035	<i>overseas</i>	-
1036	oxidize	oxidizes, oxidized, oxidizing, oxidizings, oxidise, oxidises
1037	oxygen	oxygens
1038	painful	-
1039	par	pars, parred, parring, parrings
1040	<i>panel</i>	paneled, paneling, panels
1041	<i>paradigm</i>	paradigms
1042	paradox	paradoxes
1043	<i>paragraph</i>	paragraphing, paragraphs
1044	<i>parallel</i>	paralleled, paralleled, paralleling, parallels, unparalleled
1045	parameter	<i>parameters</i>
1046	parcel	parcels, parceled, parceling, parcelings, parcelled, parcelling
1047	pardon	pardons, pardoned, pardoning, pardonings

	<b>Headwords</b>	<b>Other words in the family</b>
1048	parent	-
1049	parental	parentals
1050	parenthesis	parentheses
1051	part	partial, partials, partially
1052	participate	participant, participants, participated, participates, participating, <i>participation</i> , participatory
1053	particle	particles
1054	particular	particularly
1055	partition	partitions, partitioned, partitioning, partitionings
1056	partner	partners, <i>partnership</i> , partnerships
1057	past	-
1058	<i>passive</i>	passively, passivity
1059	pathway	pathways
1060	pattern	-
1061	peasant	peasants
1062	per	-
1063	perceive	<i>perceived</i> , perceives, perceiving, perception, perceptions
1064	<i>percent</i>	percentage, percentages
1065	perform	-
1066	<i>period</i>	periodic, periodics, periodical, periodically, periodicals, periods
1067	peripheral	peripherals
1068	permanent	-
1069	permit	-
1070	persist	persisted, persistence, <i>persistent</i> , persistently, persisting, persists
1071	person	personality
1072	<i>perspective</i>	perspectives
1073	pest	pests
1074	pesticide	pesticides
1075	<i>phase</i>	phased, phases, phasing
1076	<i>phenomenon</i>	phenomena, phenomenal, phenomenals

	<b>Headwords</b>	<b>Other words in the family</b>
1077	<i>philosophy</i>	philosopher, philosophers, philosophical, philosophicals, philosophically, philosophies, philosophise, philosophised, philosophises, philosophising, philosophize, philosophized, philosophizes, philosophizing
1078	phonological	phonologicals
1079	phosphate	phosphates
1080	photographic	photographics
1081	<i>physical</i>	physically
1082	physics	physician, physicians
1083	physiological	physiologicals
1084	pi	-
1085	planner	planners
1086	plantation	plantations
1087	plausible	plausibles
1088	plug	plugs, plugged, plugging, pluggings
1089	plural	plurals
1090	<i>plus</i>	pluses
1091	point	-
1092	polar	polars
1093	pole	poles, poled, poling, polings
1094	<i>policy</i>	policies
1095	politically	-
1096	population	-
1097	portfolio	portfolios
1098	<i>portion</i>	portions
1099	portray	portrays, portrayed, portraying, portrayings, portrayal, portrayals
1100	pose	<i>posed</i> , poses, posing
1101	position	-
1102	<i>positive</i>	positively
1103	possess	-
1104	possible	possibility
1105	poster	posters
1106	postgraduate	postgraduates
1107	potassium	-

	<b>Headwords</b>	<b>Other words in the family</b>
1108	<i>potential</i>	potentially
1109	powder	powders, powdered, powdering, powderings
1110	practice	practical
1111	practitioner	<i>practitioners</i>
1112	pragmatic	pragmatics
1113	pre	-
1114	precede	preceded, precedence, precedent, precedes, <i>preceding</i> , precedings, unprecedented
1115	precipitate	precipitates, precipitated, precipitating, precipitatings
1116	precipitation	precipitations
1117	<i>precise</i>	imprecise, precisely, precision
1118	predator	predators
1119	predict	predictability, predictable, predictably, <ipredicted< i="">, predicting, prediction, predictions, predicts, unpredictability, unpredictable</ipredicted<>
1120	predominant	predominance, <i>predominantly</i> , predominate, predominated, predominates, predominating
1121	prevalence	prevalences
1122	prey	preys, preyed, preying, preyings
1123	<i>preliminary</i>	preliminaries
1124	presence	-
1125	present	-
1126	preserve	-
1127	presume	presumably, presumed, presumes, presuming, presumings, <i>presumption</i> , presumptions, presumptuous
1128	pressure	-
1129	prevent	-
1130	<i>previous</i>	previously
1131	<i>primary</i>	primarily
1132	<i>prime</i>	primacy
1133	primer	primers
1134	primitive	primitives
1135	<i>principal</i>	principally
1136	<i>principle</i>	principled ,principles, unprincipled

<b>Headwords</b>	<b>Other words in the family</b>
1137 <i>prior</i>	prior to
1138 <i>priority</i>	priorities, prioritisation, prioritise, prioritised, prioritises, prioritising, prioritization, prioritize, prioritized, prioritizes, prioritizing
1139 probe	probes, probed, probing, probings
1140 problem	-
1141 problematic	problematics
1142 proceed	procedural, <i>procedure</i> , procedures, proceeded, proceeding, proceedings, proceeds
1143 <i>process</i>	processed, processes, processing
1144 processor	processors
1145 produce	production
1146 productive	productivity, productivities
1147 <i>professional</i>	professionally, professionals, professionalism
1148 profound	profounder, profoundest
1149 programme	-
1150 progress	progression, progressions, progressive
1151 prohibit	prohibited, prohibiting, prohibition, prohibitions, prohibitive, prohibits
1152 <i>project</i>	projected, projecting, projection, projections, projects
1153 prominent	-
1154 <i>promote</i>	promoted, promoter, promoters, promotes, promoting, promotion, promotions
1155 pronounce	pronounces, pronounced, pronouncing, pronouncings
1156 property	-
1157 <i>proportion</i>	disproportion, disproportional, disproportionately, proportional, proportionally, proportionate, proportionately, proportions
1158 propose	-
1159 proposition	propositions, propositioned, propositioning, propositionalings
1160 <i>prospect</i>	prospective, prospects
1161 protection	-
1162 <i>protocol</i>	protocols
1163 prove	-
1164 provide	provided

	<b>Headwords</b>	<b>Other words in the family</b>
1165	provision	protons
1166	proton	psychiatrics
1167	psychiatric	psychologies, psychological, psychologically, psychologist, psychologists
1168	<i>psychology</i>	publications
1169	<i>publication</i>	<i>published</i> , publisher, publishers, publishes, publishing, publishings, unpublished
1170	publish	-
1171	purely	purchased, purchaser, purchasers, purchases, purchasing
1172	<i>purchase</i>	-
1173	purpose	pursued, pursues, pursuing, pursuit, pursuits
1174	<i>pursue</i>	pulses, pulsed, pulsing, pulsings
1175	pulse	punches, punched, punching, punchings
1176	punch	punishes, punished, punishing, punishments, punishment, punishments
1177	punish	-
1178	purely	puzzles, puzzled, puzzling, puzzlings
1179	puzzle	qualitatively
1180	<i>qualitative</i>	-
1181	quality	-
1182	quantitative	-
1183	quantum	-
1184	question	-
1185	questionnaire	questionnaires
1186	quiz	<i>quizzes, quizzed, quizzing, quizzings</i>
1187	quote	<i>quotation, quotations, quoted, quotes, quoting</i>
1188	rack	racks, racked, racking, rackings
1189	radar	radars
1190	<i>radical</i>	radically, radicals
1191	radiation	radiations
1192	radius	radii
1193	rainfall	rainfalls
1194	<i>random</i>	randomly, randomness
1195	randomize	randomizes, randomized, randomizing, randomise, randomises, randomised, randomly

	<b>Headwords</b>	<b>Other words in the family</b>
1196	<i>range</i>	ranged, ranges, ranging
1197	<i>rapid</i>	-
1198	<i>rate</i>	-
1199	<i>rather than</i>	-
1200	<i>ratio</i>	Ratios
1201	<i>rational</i>	irrational, rationalities, rationalisation, rationalisations, rationalise, rationalising, rationalised, rationalises, rationalism, rationality, rationalization, rationalizations, rationalize, rationalized, rationalizes, rationalizing, rationally, rationals
1202	<i>ray</i>	rays, rayed, raying, rayings
1203	<i>react</i>	reacted, reacts, reacting, <i>reaction</i> , reactionaries, reactionary, reactions, reactive, reactivate, reactivation, reactor, reactors
1204	<i>reader</i>	-
1205	<i>readily</i>	-
1206	<i>real</i>	realism, realisms, realistic, realistics, reality
1207	<i>realm</i>	realms
1208	<i>reason</i>	reasoning
1209	<i>receive</i>	-
1210	<i>recent</i>	recently
1211	<i>receptor</i>	receptors
1212	<i>recipe</i>	recipes
1213	<i>recognition</i>	-
1214	<i>record</i>	-
1215	<i>recover</i>	recoverable, recovered, recovering, recovers, <i>recovery</i>
1216	<i>reduce</i>	reduction
1217	<i>refer</i>	reference
1218	<i>reflect</i>	-
1219	<i>refine</i>	refined, refinement, refinements, refines, refining
1220	<i>regard</i>	-
1221	<i>regime</i>	regimes
1222	<i>region</i>	regional, regionally, regions

	<b>Headwords</b>	<b>Other words in the family</b>
1223	register	deregister, deregistered, deregistering, deregisters, deregistration, <i>registered</i> , registering, registers, registration
1224	regression	regressions
1225	regulate	deregulated, deregulates, deregulating, deregulation, regulated, regulates, regulating, regulation, <i>regulations</i> , regulator, regulators, regulatory, unregulated
1226	rehabilitation	rehabilitations
1227	reinforce	<i>reinforced</i> , reinforcement, reinforcements, reinforces, reinforcing, reinforcing
1228	reject	<i>rejected</i> , rejecting, rejection, rejects, rejections
1229	relate	related, relation, relationship, relative, relatively
1230	relax	relaxation, <i>relaxed</i> , relaxes, relaxing
1231	<i>release</i>	released, releases, releasing
1232	<i>relevant</i>	irrelevance, irrelevant, relevance
1233	reluctance	<i>reluctant</i> , reluctantly
1234	rely	reliability, reliabilities, reliable, reliably, <i>reliance</i> , reliant, relied, relies, relying, unreliable
1235	remain	-
1236	remove	removable, removal, removals, <i>removed</i> , removes, removing
1237	render	renders, rendered, rendering, renderings
1238	repertoire	repertoires
1239	replace	replacement, replacements
1240	replicate	replicates, replicated, replicating, replicatiings, replication, replications
1241	report	-
1242	represent	representative
1243	reproduce	reproduces, reproduced, reproducing, reproducings
1244	reproduction	reproductions
1245	republic	republics
1246	require	<i>required</i> , requirement, requirements, requires, requiring
1247	<i>research</i>	researched, researcher, researchers, researches, researching
1248	resemble	resembles, resembled, resembling, resemblings

	<b>Headwords</b>	<b>Other words in the family</b>
1249	reservoir	reservoirs
1250	reside	resided, residence, <i>resident</i> , residential, residents, resides, residing
1251	residual	residuals
1252	residue	residues
1253	resistant	resistance
1254	resolve	<i>resolution</i> , resolved, resolves, resolving, unresolved
1255	resource	resourceful, <i>resources</i> , resourcing, unresourceful, under-resourced
1256	respect	-
1257	respiratory	-
1258	respond	responded, respondent, respondents, responding, responds, <i>response</i> , responses, responsive, responsiveness, responsible, unresponsive restoration, restored, restores, restoring restrained, restraining, restrains, restraint, <i>restraints</i> , unrestrained
1259	<i>restore</i>	restored, restoration, restored, restores, restoring restrained, restraining, restrains, restraint, <i>restraints</i> , unrestrained
1260	restrain	restricted, restricting, restriction, restrictions, restrictive, restrictively, restricts, restriction, unrestricted, unrestrictive
1261	restrict	-
1262	result	retrieves, retrieved, retrieving, retrievings
1263	retrieve	<i>retained</i> , retaining, retainer, retainers, retains, retention, retentive
1264	retain	<i>revealed</i> , revealing, reveals, revelation, revelations
1265	reveal	revenues
1266	<i>revenue</i>	reversal, reversed, reverses, reversible, reversing, reversals, irreversible
1267	<i>reverse</i>	revised, revises, revising, <i>revision</i> , revisions
1268	revise	-
1269	review	revolutionary, revolutionaries, revolutionise, revolutionized, revolutionizes, revolutionizing, revolutionist, revolutionists, revolutionize, revolutionized, revolutionizes, revolutionizing, rewrites, rewrote, rewritten, rewrited, rewriting rhetorics
1270	<i>revolution</i>	rhythms
1271	rewrite	
1272	rhetoric	
1273	rhythm	

	<b>Headwords</b>	<b>Other words in the family</b>
1274	ridiculous	-
1275	rise	-
1276	risk	-
1277	ritual	rituals
1278	<i>rigid</i>	rigidities, rigidity, rigidly
1279	robot	robots
1280	<i>role</i>	roles
1281	rope	ropes
1282	rotate	rotates, rotated, rotating, rotatings, rotation, rotations
1283	<i>route</i>	routed, routes, routing
1284	rub	rubs, rubbed, rubbing, rubbings
1285	rule	-
1286	ruler	rulers
1287	same	-
1288	sample	-
1289	scale	-
1290	scatter	scatters, scattered, scattering, scatterings
1291	<i>scenario</i>	scenarios
1292	scientific	-
1293	<i>schedule</i>	reschedule, rescheduled, reschedules, rescheduling, scheduled, schedules, scheduling, unscheduled
1294	<i>scheme</i>	schematic, schematically, schemed, schemes, scheming
1295	scholarship	scholarships
1296	<i>scope</i>	-
1297	scripture	scriptures
1298	scroll	scrolls, scrolled, scrolling, scrollings
1299	search	-
1300	second	secondary, secondly
1301	secrete	secretes, secreted, secreting, secretings
1302	<i>section</i>	sectioned, sectioning, sections
1303	<i>sector</i>	sectors
1304	sediment	sediments, sedimented, sedimenting, sedimentings
1305	secure	insecure, insecurities, insecurity, secured, securely, secures, securing, securities, <i>security</i>
1306	seek	seeking, seeks, <i>sought</i>

	<b>Headwords</b>	<b>Other words in the family</b>
1307	<i>select</i>	selected, selecting, selection, selections, selective, selectively, selector, selectors, selects
1308	<i>semantic</i>	semantics
1309	<i>semester</i>	semesters
1310	<i>sequence</i>	sequenced, sequences, sequencing, sequential, sequentially
1311	<i>semi</i>	-
1312	<i>seminar</i>	seminars
1313	<i>sense</i>	sensation, sensations, sensible, sensibles, sensitivity, sensitivities
1314	<i>sensory</i>	-
1315	<i>separate</i>	separately, separation, separations
1316	<i>series</i>	-
1317	<i>service</i>	-
1318	<i>set</i>	-
1319	<i>several</i>	-
1320	<i>severe</i>	-
1321	<i>sex</i>	sexes, sexism, sexual, sexuality, sexualities, sexually
1322	<i>shallow</i>	shallows, shalowed, shallowing, shallower, shallowest
1323	<i>shift</i>	shifted, shifting, shifts
1324	<i>shortly</i>	-
1325	<i>should</i>	-
1326	<i>show</i>	-
1327	<i>shuttle</i>	shuttles, shuttled, shuttling, shuttlings
1328	<i>significant</i>	insignificant, insignificantly, significance, significantly, signified, signifies, signify, signifying dissimilar, similarities , similarity, similarly
1329	<i>similar</i>	
1330	<i>simple</i>	simply
1331	<i>simplify</i>	simplifies, simplified, simplifying, simplifying
1332	<i>simulate</i>	simulated, simulates, simulating, simulatings, <i>simulation</i> , simulations, simultaneously
1333	<i>sin</i>	sins, sinned, sinning, sinnings
1334	<i>since</i>	-
1335	<i>single</i>	-
1336	<i>singular</i>	singulars

	<b>Headwords</b>	<b>Other words in the family</b>
1337	<i>site</i>	sites
1338	situation	-
1339	sketch	sketches, sketched, sketching, sketchings
1340	skill	-
1341	skip	skips, skipped, skipping, skippings
1342	slab	slabs, slabed, slabing, slabings
1343	slash	slashes, slashed, slashing, slashings
1344	slavery	-
1345	slot	slots, slotted, slotting, slottings
1346	snake	snakes, snaked, snaking, snakings
1347	sneeze	sneezes, sneezed, sneezing, sneezings
1348	sniff	sniffs, sniffed, niffing, sniffings
1349	<i>so-called</i>	-
1350	social	socially
1351	socialize	socializes, socialized, socializing, socialise, socialises, socialised
1351	society	-
1352	sodium	sodiums
1353	solar	solars
1354	sole	<i>solely</i>
1355	soluble	solubles
1356	solute	solutes, solution
1357	solve	-
1358	solvent	solvents
1359	some	-
1360	sometime	-
1361	<i>somewhat</i>	-
1362	sophisticate	sophisticated, sophisticating, sophisticates
1363	space	-
1364	span	spans, spanned, spanning, spannings
1365	<i>source</i>	sourced, sources, sourcing
1366	spatial	spatials
1367	special	-
1368	specialty	specialties, speciality, specialities
1369	<i>specific</i>	specifically, specification, specifications, specificity, specifics

	<b>Headwords</b>	<b>Other words in the family</b>
1370	specify	specifiable, <i>specified</i> , specifies, specifying, unspecified
1371	specimen	specimens
1372	spectrum	spectrums, spectra
1373	sperm	sperms
1374	<i>sphere</i>	spheres, spherical, spherically
1375	splice	splices, spliced, splicing, splicings
1376	sponsorship	sponsorships
1377	spontaneous	-
1378	spray	sprays, sprayed, spraying, sprayings
1379	spread	-
1380	stable	instability, stabilisation, stabilise, stabilised, stabilises, stabilising, stabilization, stabilize, stabilized, stabilizes, stabilizing, stabilizings, <i>stability</i> , unstable, unstables
1381	stack	stacks, stacked, stacking, stackings
1382	stadium	stadiums
1383	stance	stances, stanced, stancing, stancings
1384	standard	standardize, standardizes, standardizing, standardise, standardises, standardised
1385	static	statics
1386	state	-
1387	statistic	statistician, statisticians, statistical, statisticals, statistically, <i>statistics</i>
1388	<i>status</i>	-
1389	stereotype	stereotypes, stereotyped, stereotyping, stereotypings
1390	stimulate	-
1391	stimulus	stimuli
1392	<i>straightforward</i>	-
1393	strand	strands, stranded, stranding, strangings
1394	strategy	strategic, <i>strategies</i> , strategically, strategist, strategists
1395	strengthen	-
1396	<i>stress</i>	stressed, stresses, stressful, stressing, unstressed
1397	strict	strictly
1398	stripe	stripes, striped, striping, stripings

	<b>Headwords</b>	<b>Other words in the family</b>
1399	strongly	-
1400	<i>structure</i>	restructure, restructured, restructures, restructuring, structural, structurally, structured, structures, structuring, unstructured
1401	style	styled, <i>styles</i> , styling, stylish, stylise, stylised, stylises, stylising, stylize, stylized, stylizes, stylizing
1402	study	-
1403	sub	subs, subbed, subbing, subbings
1404	subject	-
1405	subject to	-
1406	subjective	-
1407	submit	submission, submissions, submits, <i>submitted</i> , submitting
1408	<i>subordinate</i>	subordinates, subordination
1409	subset	subsets
1410	<i>subsequent</i>	subsequently
1411	subsidy	<i>subsidiary</i> , subsidies, subsidise, subsidised, subsidises subsidising, subsidize, subsidized, subsidizes, subsidizing
1412	substantial	-
1413	substitute	substituted, substitutes, substituting, <i>substitution</i> , substitutions
1414	substrate	substrates
1415	subtle	subtler, subtlest
1416	subtract	subtracts, subtracted, subtracting, subtractings
1417	success	successful, successfully
1418	successor	succession, successions, <i>successive</i> , successively, successors
1419	such	-
1420	such as	-
1421	suffer	-
1422	<i>sufficient</i>	sufficiency, insufficient, insufficiently, sufficiently
1423	suggest	-
1424	suicide	suicides
1425	suitable	-
1426	<i>sum</i>	summation, summed, summing, sums

	<b>Headwords</b>	<b>Other words in the family</b>
1427	<i>summary</i>	summaries, summarise, summarised, summarises, summarising, summarisation, summarisations, summarization, summarizations, summarize, summarized, summarizes, summarizing
1428	<i>super</i>	supers
1429	<i>superior</i>	superiors
1430	<i>supply</i>	-
1431	<i>supplement</i>	<i>supplementary</i> , supplemented, supplementing, supplements
1432	<i>support</i>	-
1433	<i>supposedly</i>	-
1434	<i>surgeon</i>	surgeons
1435	<i>surgical</i>	surgicals
1436	<i>surplus</i>	surpluses
1437	<i>surprising</i>	-
1438	<i>survey</i>	surveyed, surveying, surveys
1439	<i>survive</i>	survival, survived, survives, surviving, survivor, survivors
1440	<i>susceptible</i>	susceptibles
1441	<i>suspend</i>	<i>suspended</i> , suspending, suspends, suspension
1442	<i>sustain</i>	<i>sustainable</i> , sustainables, sustainability, sustained, sustaining, sustains, sustenance, unsustainable
1443	<i>swap</i>	swaps, swapped, swapping, swappings
1444	<i>swell</i>	swells, swelled, swelling, swollen
1445	<i>sword</i>	swords, sworded, swording, swordings
1446	<i>syllable</i>	syllables, syllabled
1447	<i>syllabus</i>	syllabi, syllabuses
1448	<i>symbol</i>	<i>symbolic</i> , symbolics, symbolically, symbolise, symbolises, symbolised, symbolising, symbolism, symbolize, symbolized, symbolizes, symbolizing, symbols
1449	<i>syndrome</i>	syndromes
1450	<i>syntactic</i>	syntactics
1451	<i>syntax</i>	-
1452	<i>synthesis</i>	syntheses
1453	<i>synthetic</i>	synthetics

	<b>Headwords</b>	<b>Other words in the family</b>
1454	system	systematic, systematics
1455	tackle	-
1456	tape	taped, <i>tapes</i> , taping
1457	<i>target</i>	targeted, targeting ,targets
1458	<i>task</i>	tasks
1459	<i>team</i>	teamed, teaming, teams
1460	tech	techs
1461	<i>technical</i>	technically
1462	technique	<i>techniques</i>
1463	<i>technology</i>	technological, technologically
1464	temporal	temporals
1465	<i>temporary</i>	temporarily
1466	tempt	tempts, tempted, tempting, temptings
1467	tend	tendency
1468	tense	<i>tension</i> , tensely, tenser, tensest, tensions, tenses, tensed, tensing, tensings
1469	term	-
1470	terminate	terminal, terminals, terminated, terminates, terminating, <i>termination</i> , terminations
1471	terminology	terminologies
1472	terribly	-
1473	<i>text</i>	texts, textual
1474	textbook	textbooks
1475	than	-
1476	that	-
1477	the	-
1478	their	-
1479	<i>theme</i>	themes, thematic, thematically
1480	themselves	-
1481	theorem	theorems
1482	<i>theory</i>	theoretical, theoretically, theories, theorist, theorists
1483	<i>thereby</i>	-
1484	therefore	-
1485	thermal	thermals
1486	these	-

	<b>Headwords</b>	<b>Other words in the family</b>
1487	<i>thesis</i>	theses
1488	thickness	thicknesses
1489	third	-
1490	this	-
1491	those	-
1492	thread	threads, threaded, threading, threadings
1493	threshold	thresholds
1494	thumb	thumbs, thumbed, thumbing, thumbings
1495	thus	-
1496	to	-
1497	tolerance	tolerances
1498	ton	tons
1499	<i>topic</i>	topical, topics
1500	total	-
1501	toxic	toxics
1502	<i>trace</i>	traceable, traced, traces, tracing
1503	tract	tracts
1504	tradition	non-traditional, <i>traditional</i> , traditionalist, traditionally, traditions
1505	trait	traits
1506	trajectory	trajectories
1507	trans	-
1508	transaction	transactions
1509	transcribe	transcribes, transcribed, transcribing, transcribings
1510	transcription	transcriptions
1511	<i>transfer</i>	transferable, transference, transferred, transferring, transfers
1512	transform	<i>transformation</i> , transformations, transformed, transforming, transforms
1513	transit	transited, transiting, <i>transition</i> , transitional, transitions, transitory, transits
1514	translation	translations
1515	transmit	<i>transmission</i> , transmissions, transmitted, transmitting, transmittings, transmits
1516	transparency	transparencies

	<b>Headwords</b>	<b>Other words in the family</b>
1517	transplant	transplants, transplanted, transplanting, transplantings
1518	<i>transport</i>	transportation, transported, transporter, transporters, transporting, transports
1519	trauma	traumas
1520	treat	-
1521	treaty	treaties
1522	tremendous	-
1523	<i>trend</i>	trends
1524	true	-
1525	triangle	triangles
1526	tribe	tribes
1527	tricky	trickier, trickiest
1528	<i>trigger</i>	triggered, triggering, triggers
1529	trivial	trivials
1530	tropical	tropicals
1531	tumor	tumors, tumour, tumours
1532	turbulent	-
1533	tutor	tutors, tutored, tutoring, tutorings
1534	type	-
1535	typical	typically
1536	ultimate	<i>ultimately</i> , ultimates
1537	uncertainly	-
1538	<i>undergo</i>	undergoes, undergoing, undergone, underwent
1539	undergraduate	undergraduates
1540	underlie	underlay, underlies, <i>underlying</i>
1541	undermine	undermines, undermined, undermining, underminings
1542	underneath	-
1543	understanding	-
1544	undertake	<i>undertaken</i> , undertakes, undertaking, undertook
1545	unemployed	-
1546	<i>uniform</i>	uniformity, uniformly
1547	unify	unification, <i>unified</i> , unifies, unifying, unifyings
1548	<i>unique</i>	uniquely, uniqueness

	<b>Headwords</b>	<b>Other words in the family</b>
1549	unintelligible	unintelligibles
1550	unit	-
1551	unity	unities
1552	unlike	unlikely
1553	unsuccessful	-
1554	uplift	uplifts, uplifted, uplifting, upliftings
1555	upon	-
1556	upward	upwards
1557	urine	-
1558	usage	usages
1559	use	useful
1560	utilise	utilisation, utilised, utilises, utilising, utiliser, utilisers, <i>utility</i> , utilities, utilization, utilize, utilized, utilizes, utilizing
1561	utterance	utterances
1562	vague	-
1563	valid	invalidate, invalidity, validate, validated, validating, validation, <i>validity</i> , validities, validly
1564	vary	invariable, invariably, variability, variabilities, variable, <i>variables</i> , variably, variance, variances, variant, variants, variation, variations, varied, varies, varying
1565	value	valuable
1565	valve	valves, valved
1567	vary	varied, variety, various, variation
1568	vector	vectors
1569	vegetation	-
1570	<i>vehicle</i>	vehicles
1571	vein	veins, veined, veining, veinings
1572	velocity	velocities
1573	verbal	verbals
1574	verse	-
1575	<i>version</i>	versions
1576	versus	-
1577	vertical	verticals
1578	<i>via</i>	-

	<b>Headwords</b>	<b>Other words in the family</b>
1579	viable	viables
1580	view	-
1581	viewpoint	-
1582	violate	violated, violates, violating, <i>violation</i> , violations
1583	virtue	virtues
1584	virtual	<i>virtually</i>
1585	<i>visible</i>	visibility, visibly, invisible, invisibility
1586	<i>vision</i>	Visions
1587	<i>visual</i>	visualise, visualised, visualised, visualising visualisation, visualize, visualized, visualizing, visualization, visually
1588	vital	-
1589	vitamin	vitamins
1590	vocabulary	vocabularies
1591	volition	volitions
1592	<i>volume</i>	volumes, vol
1593	<i>voluntary</i>	voluntarily, volunteer, volunteering, volunteered, volunteers
1594	vowel	vowels
1595	watershed	watershads
1596	weave	weaves, wove, weaving, woven, weaved, weavings, wavelength, wavelengths
1597	<i>welfare</i>	-
1598	wheat	wheats
1599	<i>whereas</i>	-
1600	whereby	-
1601	whether	-
1602	whether or not	-
1603	whichever	whichevers
1604	which	-
1605	whoever	whoevers
1606	whole	wholly
1607	wide	widely
1608	<i>widespread</i>	widespreads
1609	wisdom	wisdoms

	<b>Headwords</b>	<b>Other words in the family</b>
1610	within	-
1611	work	-
1612	workshop	workshops
1613	world	-
1614	write	-
1615	yeast	yeasts
1616	yield	-



## Appendix B

### Answer key

#### **Chapter 1**

##### **Exercise 1-1:**

1. light (n.): a piece of equipment that produces light
2. light (adj.): (of color) pale
3. light (v.): to start to burn or to make something start to burn
4. favorite (adj.): best liked or most enjoyed
5. favorite (n.): thing that is best liked or most enjoyed

##### **Exercise 1-2:**

1. bio (life)
2. dict (tell)
3. port (carry)
4. meter (measure)
5. phone (sound)

##### **Exercise 1-3:**

1. portable
2. predict
3. biology
4. telephone
5. thermometer

##### **Exercise 1-4:**

1. un (reverse of)
2. im (not)
3. non (not)
4. over (above, beyond)
5. sub (under)

##### **Exercise 1-5:**

1. unlock
2. impolite
3. nonviolent

4. overdue
5. subway

##### **Exercise 1-6:**

1. -ly (adv.): characteristic of
2. -ful (adj.): full of
3. -able (adj.): can be
4. -ment (n.): condition of
5. -en (v.): become

##### **Exercise 1-7:**

1. fasten
2. government
3. comfortable
4. wonderful
5. friendly

##### **Exercise 1-8:**

1. trans- + port  
*transport* (v.): to take goods or people from one place to another
2. dict + -ate  
*dictate* (v.): to give orders, or tell someone exactly what they must do
3. inter- + vent + -tion  
*intervention* (n.): the act or fact of becoming involved intentionally in a difficult situation
4. de- + act + -ivate  
*deactivate* (v.): to cause something to be no longer active or effective
5. fore- + see  
*foresee* (v.): to know about something before it happens

**Exercise 1-9:**

1. girl + friend
2. break + fast
3. sleep + walk
4. dry + clean
5. breath + test
6. over + night
7. bitter + sweet
8. astro + logy
9. bio + chemistry
10. good + looking

**Exercise 1-10:**

1. e
2. f
3. i
4. g
5. h
6. c
7. d
8. j
9. a
10. b

**Exercise 1-11:**

1. girlfriend
2. breakfast
3. dry-cleaned
4. breath tests
5. overnight
6. sleepwalked
7. bitter-sweet
8. astrology
9. biochemistry
10. good-looking

**Exercise 1-12:**

Verb	Noun	Adjective	Adverb
		<i>interesting</i>	
	<i>emotions</i>		
	<i>sadness</i>		
<i>breathe</i>			
			<i>correctly</i>

**Exercise 1-13:**

1. excited + -ly  
*excitedly* (adv.): in an excited manner
2. help + -ful  
*helpful* (adj.): willing to help
3. sad + -ness  
*sadness* (n.): the state of being sad
4. under- + water  
*underwater* (adj.): under the surface of the water
5. notice + -ably  
*noticeably* (adv.): in a noticeable manner

**Exercise 1-14:** the answers will vary.**Chapter 2****Exercise 2-1:**

1. be- (make, become)
2. de- (reverse)
3. dis- (opposite of)
4. anit- (against, opposite)
5. co- (together, jointly)

**Exercise 2-2:**

1. disconnect
2. coordinate
3. antisocial
4. decentralize
5. befriend

**Exercise 2-3:**

1. unbelievable: not able to be believed because unlikely
2. nonfiction: the type of book that deals with facts, not imaginary stories
3. misunderstood: to fail to understand something or someone
4. hyperactive: extremely or unusually active
5. self-taught: learned or trained by yourself

**Exercise 2-4:**

1. unbelievable
2. nonfiction
3. hyperactive
4. misunderstand
5. self-taught

**Exercise 2-5:**

1. c
2. e
3. d
4. b
5. a

**Exercise 2-6:**

1. monotone
2. polyglot
3. multinational
4. overslept
5. underestimate

**Exercise 2-7:**

1. forecast
2. subtitles
3. exclusive
4. coordinator
5. communicate

**Exercise 2-8:**

1. executive
2. communicate
3. coordinator
4. forecast
5. Subtitles

**Exercise 2-9:**

1. c
2. e
3. d
4. a
5. b

**Exercise 2-10:**

1. illegible
2. unpredictable
3. decaffeinated
4. malnutrition
5. misfortunes

**Exercise 2-11:**

1. c
2. d
3. e
4. b
5. a

**Exercise 2-12:**

1. psychology
2. aquariums
3. legal
4. beloved
5. self-control

**Exercise 2-13:**

1. nonprofit: without the aim of making a profit
2. malnutrition: a poor condition of health caused by a lack of food or a lack of the right type of food

3. prevented: to stop somebody from doing something: to stop something from happening
4. inexpensive: not costing a lot of money
5. unnecessary: not needed

**Exercise 2-14:** the answers will vary

### Chapter 3

#### Exercise 3-1:

1. -er (comparative adjective)
2. -ese (person belonging to)
3. -ly (resembling)
4. -ize (to make)
5. -ate (full of, to make)

#### Exercise 3-2:

1. softly
2. stronger
3. Japanese
4. memorize
5. originate

#### Exercise 3-3:

1. -ed (regular past tense)
2. -ed (regular past participle)
3. -er (comparative)
4. -est (superlative)
5. -s (plural)

#### Exercise 3-4:

1. destroyed (v.)
2. planer (n.)
3. noticeable (adj.)
4. argument (n.)
5. happiness (n.)

**Exercise 3-5:** the answers will vary

#### Exercise 3-6:

1. e
2. d
3. a
4. c
5. b

#### Exercise 3-7:

1. friendship
2. childhood
3. freedom
4. handful
5. foolish

#### Exercise 3-8:

1. b
2. e
3. d
4. a
5. c

#### Exercise 3-9:

1. sharpen
2. giggling
3. verify
4. modernized
5. deepen

#### Exercise 3-10:

1. homeless
2. talkative
3. visible
4. beautiful
5. religious

#### Exercise 3-11:

1. religious
2. visible
3. beautiful
4. homeless
5. talkative

**Exercise 3-12:**

1. capacity
2. strengthen
3. runner
4. booklet
5. correctness

**Exercise 3-13:**

1. correctness
2. capacity
3. strengthen
4. runner
5. booklet

**Exercise 3-14:**

1. c
2. d
3. e
4. b
5. a

**Exercise 3-15:**

1. quickly
2. onwards
3. sideways
4. clockwise
5. directly

**Exercise 3-16:**

1. employee
2. positive
3. public
4. nutritious
5. inspiration
6. paranoid
7. loyalty
8. frequency
9. assistant
10. standardized

**Exercise 3-17:**

1. condition: the particular state that something or someone is in
2. desirable: worth wanting or having
3. stressful: causing worry and anxiety
4. usually: in the way that most often happens
5. harmless: not able or not likely to cause harm

**Exercise 3-18:** the answers will vary

**Chapter 4****Exercise 4-1:**

1. d
2. h
3. g
4. a
5. i
6. j
7. b
8. f
9. e
10. c

**Exercise 4-2:** the answers will vary

**Exercise 4-3:**

1. construction
2. portfolio
3. action
4. dictation
5. alternative
6. aquatic
7. astronomer
8. biotic
9. pedestrian
10. phonics

**Exercise 4-4:**

1. view
  2. syn
  3. sen
  4. cred
  5. gram
  6. mov
  7. pos
  8. cycl
  9. cede
  10. ject
5. cycl
  6. ortho
  7. anti
  8. techn
  9. micro
  10. onym

**Exercise 4-5:**

1. d
  2. f
  3. g
  4. h
  5. a
  6. i
  7. e
  8. j
  9. b
  10. c
5. g
  6. b
  7. f
  8. c
  9. e
  10. d

**Exercise 4-6:**

1. interceded
2. sensor
3. synthesis
4. injection
5. removed
6. deposit
7. preview
8. cyclones
9. biography
10. incredible

**Exercise 4-8:**

1. j
2. i
3. h
4. a
5. g
6. b
7. f
8. c
9. e
10. d

**Exercise 4-9:**

1. monarch
2. bicycle
3. leukemia
4. microbiology
5. pseudonym
6. orthopedists
7. antipathy
8. technical
9. toxic
10. hydrophobia

**Exercise 4-10:**

1. form
2. spect
3. dorm
4. vaca
5. cide
6. ject
7. ven
8. just
9. cept

**Exercise 4-7:**

1. phobia
2. tox
3. emia
4. arch

10. contra

3. photometers

**Exercise 4-11:**

1. h
2. j
3. g
4. f
5. i
6. d
7. b
8. a
9. e
10. b

3. photometers
4. diameter
5. odometer
6. speedometer
7. metronome
8. optometer
9. barometer
10. anemometer

**Exercise 4-12:**

1. inspect
2. transformed
3. intravenous
4. justify
5. rejected
6. vacancies
7. insecticide
8. accept
9. contradicted
10. dormitory

**Exercise 4-15:**

1. psychology: the scientific study of how the mind works and how it influences behavior
2. scientific: relating to science
3. systematic: using an organized method that is often detailed
4. describe: to say or write what someone or something is like
5. predict: to say that an event or action will happen in the future

**Exercise 4-16:** the answers will vary.

**Chapter 5**

**Exercise 5-1:**

1. h
2. g
3. a
4. e
5. j
6. i
7. c
8. b
9. d
10. f

**Exercise 4-13:**

1. voltmeter
2. photometer
3. diameter
4. odometer
5. speedometer
6. metronome
7. optometer
8. barometer
9. pulsometer
10. anemometer

**Exercise 5-2:**

1. legal
2. fundamental
3. challenge
4. analyze

**Exercise 4-14:**

1. pulsometer
2. voltmeter

5. bias
6. comments
7. culture
8. achieve
9. access
10. guideline

**Exercise 5-3:** the answers will vary.

**Exercise 5-4:**

1. d
2. i
3. a
4. g
5. f
6. c
7. j
8. b
9. e
10. h

**Exercise 5-5:**

1. collaborative learning
2. dehydration
3. hacker
4. democracy
5. phonics
6. search engine
7. toxin
8. asthma
9. CEO
10. entrepreneurs

**Exercise 5-6:** the answers will vary.

**Exercise 5-7:**

1. metaphor
2. synonym
3. defendant
4. centimeter
5. lyrics

6. anatomy
7. revenue
8. hypothesis
9. impressionism
10. intelligence

**Exercise 5-8:**

1. metaphor
2. revenue
3. synonym
4. defendant
5. anatomy
6. lyrics
7. hypothesis
8. impressionism
9. intelligence
10. centimeters

**Exercise 5-9:** the answers will vary.

**Exercise 5-10:**

1. improvement: the act of making something better
2. overcoming: to succeed in dealing with or controlling a problem that has been preventing you from achieving something
3. effectively: in a way that produces the intended result or a successful result
4. education: a process of teaching, especially in schools or colleges, to improve knowledge and develop skills
5. social: connected with society and the way it is organized
6. encourage: to give somebody support, courage or hope
7. passively: the form of a verb used when the subject is affected by the action of the verb

8. identify: to recognize somebody/something and be able to say who or what they are
9. personal: your own; not belonging to or connected with anyone else
10. relations: the way in which two people, groups or countries behave towards each other or deal with each other

**Exercise 5-11:** the answers will vary.

