

Lesson 8

SOME BIOLOGY

A. READING

Inferencing

Last week, we studied about referencing. Today, we will study about inferencing, another important reading skill that we must practice a lot. To infer means to draw a conclusion from information that is not found in the reading text. So, inferencing is like the opposite of referencing. When we refer to something, we have the thing in the text. When we infer, again, we do not have the thing in the text.

Just like for referencing, there are a number of techniques that we can use for inferencing. Follow the information below.

Context Clues

We have known this from a previous lesson. We can infer an idea in a passage by using words, phrases, or sentences in the passage. We fill in a blank, something that we do not know, by using the context. In the previous lesson about context clues, we have practised how to use context clues to find the meaning of a word. Please refer to that lesson for a more complete information.

Logical Summary

Pocket calculators are already having a great effect on the teaching of mathematics, even at the level of elementary education. But they are about to be succeeded by devices of much greater power and sophistication—machines that may change the very nature of the educational system.

1. We can infer that the pocket calculator (is/is not) powerful enough. **Is not.**
2. In the future, the educational system will be (less efficient/more efficient). **More efficient.**

Predicting

Pocket calculators are already having a great effect on the teaching of mathematics, even at the level of elementary education. But they are about to be succeeded by devices of much greater power and sophistication—machines that may change the very nature of the educational system.

1. The paragraph before most probably discussed:
A. the effect of pocket calculators
B. the teachers of mathematics
C. the price of pocket calculators
D. the more powerful devices

What is the answer?

2. The paragraph that follows will most probably discuss:
A. mathematics in the elementary schools
B. the power of pocket calculators
C. machines that can be used for teaching
D. the more powerful devices

What is the answer?

Writer's Intention and Tone

I dropped another coin, selected the same "coffee with sugar", and waited. Again, the machine clicked but, again, nothing happened. "Stupid machine!" I screamed and slammed my fists against the side metal. And nothing happened.

1. Is the writer happy or furious?
2. What will the writer most probably do?

Exercise

The group *species* is the starting point for classification. Sometimes smaller groups, subspecies, are recognized, but these will not concern us until we discuss evolution. There are many larger groups: genus, family, order, class, phylum, and kingdom.

Let us begin with the first seven species. We belong to the genus *Homo* and to these more inclusive groups: (1) the family Hominidae, *which* includes, in addition to *Homo*, extinct men not of the genus *Homo*, and (2) the order Primates, which includes also the lemurs, monkeys, and apes. The three cats—lion, house cat, and tiger—belong to the genus *Felis*. In general we can think of a *genus* as a group of closely related species. The three cats also belong to the family Felidae. Generally, a *genera* is included into a *family*.

The first seven species, different enough to be put in three orders, are yet alike in many ways. *All* are covered with hair, they nurse their young with milk, and their red blood cells are without nuclei. Because of these and other resemblances, they are combined in a still more inclusive group, Class Mamalia. A class, therefore, is composed of related orders.

(Adapted from: F. Grellet, *Developing Reading Skills*, Cambridge University Press, London, 1981)

1. According to the text, humans belong to all the following groups, except: ---.
A. Felis
B. Homo
C. Primate
D. Hominidae
2. According to the text, human being belongs to ---.
A. two groups
B. three groups
C. four groups
D. seven groups
3. The article *all* (l. 11) refers to ---.
A. seven species
B. many ways
C. red blood cells
D. three orders
4. The conjunction *which* (l. 5) refers to ---.
A. the first seven species
B. inclusive groups
C. the family Hominidae
D. extinct men
5. The word *genera* (l. 9) is mostly related to ---.
A. cats
B. genus
C. general
D. primates
6. A good title for the text would be ---.
A. Evolution
B. How to Start a Classification
C. Resemblances
D. The Classification of Species
7. The paragraph that comes before would most probably be about ---.
A. evolution
B. smaller groups and larger groups
C. Class Mamalia
D. the classification of species
8. The main idea of the third paragraph is ---.
A. Animals are covered with hair.
B. The first seven species are alike.
C. The seven species are called Mamalia.
D. The first seven species are different enough.

9. The word *closely* (l. 8) most probably means the same as ---.
- nearest
 - not opened
 - wrongly
 - differently

10. The second paragraph is mainly about ---.
- the difference between *genera* and *family*
 - the family Hominidae
 - classification of the seven species
 - Hominidae and primates

B. VOCABULARY

Prepositions and Idioms

Idioms are words or phrases that are used in a specific way. They have specific meanings. To be able to master correct use of prepositions and idioms in English is hard work. It needs a lot of memorization and practice. The list below contains only prepositions and idioms which are often used in communication. It is not a complete list. If you want to know more about prepositions and idioms, you can turn to other references. A good grammar book or a good dictionary will have a good coverage of English prepositions and idioms.

One-word Prepositions

Group	Preposition	Example
Time	at (hour) on (day, date) in (month, year) between (two) among (more than two)	The play will begin <u>at</u> 8.30. The leave <u>on</u> Monday, <u>on</u> 7th June. <u>In</u> December, activities mount. The place is <u>between</u> two large rivers. <u>Among</u> the students, she is the best.
Place	at (point, spot) on (road, street) in (city, country)	They live <u>at</u> 23 North Park Street. There are many stores <u>on</u> Broad Street. <u>In</u> this country, people are very friendly.
Cause	from because of	The chairs are wet <u>from</u> the rain. The chairs are wet <u>because of</u> the rain.
Purpose	for	This place is good <u>for</u> sport activities.
Means	by	You can reach the place <u>by</u> bus.
Condition	despite in spite of	<u>Despite</u> the rain, we depart. <u>In spite of</u> the rain, we depart.
Addition	besides	<u>Besides</u> a cat, we have some birds.
Replacement	instead of	We took a bus, <u>instead of</u> a train.
Exception	except for	<u>Except for</u> that girl, all must go.
Example	such as	We breed birds <u>such as</u> canaries.
Time limit	from to from to	She worked her <u>from</u> 1985. She worked her <u>to</u> 1995. She worked her <u>from</u> 1985 <u>to</u> 1995.

Other Prepositions

Group	Preposition	Example
two-word	regardless of due to, along with prior to, apart from owing to, next to subject to	<u>Regardless of</u> the rain, we proceed. The party was canceled <u>due to</u> the storm. <u>Prior to</u> departure, they said prayers.
three-word	with reference to on account of on behalf of in accordance with in addition to in favor of	This was said <u>with reference to</u> good tests. It was postponed <u>on account of</u> rain. <u>On behalf of</u> the family, I thank you all.
verb + prep	approve of, consist of result in (effect) result from (cause) laugh at, beware of wait for, crave for object to, insist on feed on, deal with vote for, turn into distinguish between	They finally <u>approved of</u> the proposal. The food <u>consists of</u> rice and vegetables. Much rain has <u>resulted in</u> broken roads.
adjective + prep	capable of, eager for amazed at, puzzled at indebted to, tired of married to, bored with infested with interested in placed under	She is <u>capable of</u> taking over the post. All of us were <u>eager for</u> the new pool. We are <u>amazed at</u> what he can do.

Idioms

Group	Preposition	Example
look	look at, look for, look after, look out	<u>Look at</u> those children playing kickball! I'm <u>looking for</u> my book I bought yesterday. Would you <u>look after</u> our plants while we ... Look out! He water is hot.
put	put on, put out, put off	His success has <u>brought about</u> great ... They <u>called off</u> the meeting after the fight. <u>Put on</u> your hat. It's raining. The firemen worked hard to <u>put out</u> the fire. The meeting was <u>put off</u> because of the rain.
turn	turn on, turn off, turn in, turn out,	Sit down, <u>turn on</u> the TV, and relax. <u>Turn off</u> the electricity before you go out. You must <u>turn in</u> your assignment tomorrow.
run	run out, run after, run into, run across	We stopped because we <u>ran out</u> of gas. The man <u>ran after</u> the dog who <u>ran after</u> the cat. I ran across an old friend when I went to town.
other	call off, bring about, do with/without, hand in, make up, give up	The meeting was <u>called off</u> , so we went home. Our efforts <u>brought about</u> some result. You must <u>hand in</u> your assignment tomorrow.

Exercise

Use the correct forms of the prepositions or prepositional constructions.

1. It's getting dark; please, turn (on/off) the lights.
 2. She's been looking (at/for) a new job for quite some time now.
 3. Look (out/after)! There is a big hole in front of you.
 4. He arrived (at/on/in) three o'clock this afternoon. He will be leaving (at/on/in) Saturday morning.
 5. There are four 20-watt neon lights (at/on/in) the ceiling and two 10-watt bulbs (at/on/in) the walls.
 6. They promised to give us new books. It turned (on/off/out) to be a bluff.
 7. We were interested (in/with/by) the new exhibits displayed during the promotion days.
 8. Apart (of/from/out) the broken handle, the camera is working perfectly.
 9. (On, In) behalf (by/of) the new members, I would like to thank everybody for receiving us warmly.
 10. The group consists (of/from) eight members.
 11. There is a difference (among/between) the two species of animals.
 12. I think that everybody is capable (for/of) taking the role as leader in this class.
 13. We laughed a lot (for/at/with) his jokes during the party.
 14. Many people were bored (at/with) the program; so they were trying something different.
 15. The workers insisted (on/for/in) having a 200 percent salary raise.
- 1.

C. GRAMMAR

Noun Phrase: Revision

A noun phrase is a group of words with a noun head as the nucleus and some other words as modifiers or qualifiers. Modifiers are words that modify and precede the nucleus head. Qualifiers are words that qualify and follow the nucleus head. A qualifier can be in the form of various words.

Qualifiers

Qualifiers are often called post modifiers. Qualifiers can consist of one or more words. They can be prepositional phrases, adjectives followed by phrases or clauses, infinitives, present participles, past participles, place adverbs, time adverbs, and relative clauses.

1. prepositional phrases

*a girl **with red hair***
*the man **in the dark glasses***

2. adjectives followed by phrases

*machinery **capable of clearing rubble off the main road***
*a concept **inconceivable a hundred years earlier***

3. infinitives (verbs with 'to')

*a simple device **to test lung function***
*a comfortable chair **to sit on***

4. present participles ('-ing' form verbs)

*the cards **lying on the table***
*the girl **waiting outside***

5. past participles ('-ed' form verbs)

*two of the problems **mentioned above**
a novel **written by a famous author***

6. place adverbs

*down in the dungeon **underneath**
the sentences **below***

7. time adverbs

*a reflection of life **today** in Indonesia
the meeting **this afternoon***

8. relative clauses

*Shortly after the shooting, the man **who had done it** was arrested.
Jakarta is the town **that Jono comes from**.*

Exercise 1

Identify the **head words** and **modifiers** and **qualifiers** of the following phrases.

1. elasticity of supply
2. a response to changes in price
3. a consumer's desire of the intention to pay
4. our willingness for offering money for particular goods or services
5. a means of exchanges between commodities which do have values to us
6. our personal scale of preferences
7. the kind of luxuries which help us to be comfortable
8. special furniture in the newly-opened store
9. those non-essentials which give us pleasure
10. a measure of the change in the quality of goods



Exercise 2

Copy out all the *noun phrases* you can find in the following passage and identify the *head words* and *modifiers* and *qualifiers* of the following phrases.

The Boeing Company of Seattle is the world's largest commercial aircraft manufacturer. Although its market share of the 1980s slipped from over 70% to about 55%, Boeing continues to be strong in the international markets and also in the domestic markets. Indeed, a reason for Boeing's dominant market share has been its international market success. The Boeing 737 design completely dominates the international market for jet aircraft.

In the late years of 1960s, Boeing introduced the 737 jet plane to compete with McDonnell Douglas DC-9 series. However, Boeing entered the market three years behind McDonnell Douglas and the 737 was not quite as fast as the DC-9. The result was that even though Boeing won a few orders from several US airlines, sales of the 737 began to fall off during the late 1970s. Bob Norton, a Boeing engineer, was given the task of trying to save the plane. And he did it.

Norton decided to pursue an international strategy. He focused on the underdeveloped areas of the world--the Mideast, Africa, and South America particularly. Runways in those areas were typically constructed of asphalt instead of concrete and were too soft for the 737. Boeing's engineers then redesigned the 373's wings and engines to permit shorter landings and faster take-offs. They redesigned the landing gear and installed low-pressure tires so that the 373 could land on asphalt runways. The redesign worked.