

READING PLANET

3

STUDENT BOOK

Contents

Introduction

Unit 1 Animals: Working Together

Lesson 1	Busy Bees	10
Lesson 2	Naked Mole Rats	18
Review	Connecting Lesson 1 and Lesson 2	26

Unit 2 Technology: Revolution in Agriculture

Lesson 1	The Little Bit	30
Lesson 2	Plowing Ahead	38
Review	Connecting Lesson 1 and Lesson 2	46

Unit 3 Arts: Graffiti

Lesson 1	Art or Vandalism?	50
Lesson 2	A Mysterious Artist	58
Review	Connecting Lesson 1 and Lesson 2	66

Unit 4 Health: Your Liver & Your Kidneys

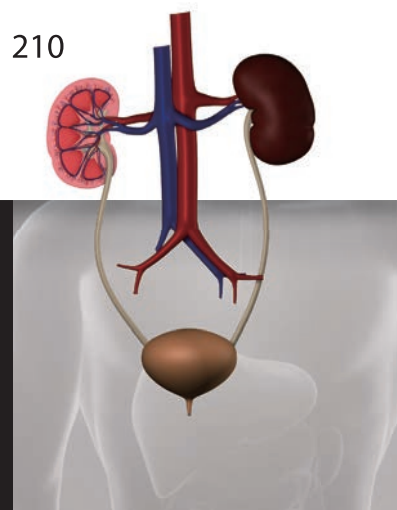
Lesson 1	You Can't Live Without Your Liver!	70
Lesson 2	Filtering Beans	78
Review	Connecting Lesson 1 and Lesson 2	86

Unit 5 People and Culture: East Germany

Lesson 1	East and West	90
Lesson 2	The Trabant	98
Review	Connecting Lesson 1 and Lesson 2	106



Unit 6	Our Earth: Freak Weather	
Lesson 1	Nature's Most Violent Storms	110
Lesson 2	Thunderstorms	118
Review	Connecting Lesson 1 and Lesson 2	126
Unit 7	Business: Ingenious Marketing	
Lesson 1	Product Placement	130
Lesson 2	The Tupperware Story	138
Review	Connecting Lesson 1 and Lesson 2	146
Unit 8	Careers: The Built Environment	
Lesson 1	Architecture as a Career Path	150
Lesson 2	Bridges, Roads and Buildings	158
Review	Connecting Lesson 1 and Lesson 2	166
Unit 9	History: The Conquest of the Americas	
Lesson 1	A New World?	170
Lesson 2	The Fall of the Incan Empire	178
Review	Connecting Lesson 1 and Lesson 2	186
Unit 10	Architecture: Modern Construction	
Lesson 1	Building Your Own Unique Home	190
Lesson 2	The Burj Khalifa	198
Review	Connecting Lesson 1 and Lesson 2	206
	Word List	210



1. High-Interest Passages

The Reading Planet series features an exciting array of non-fiction content. Each reading passage provides students with a balanced and informative look at a range of subjects, such as animals, technology, arts, business, and history.

The Year Without a Summer

March 18

Even though most people can't find it on a map, the small Indonesian island of Sumbawa has played an important role in history. Sumbawa is situated in the east of the people's most island of Bali and is currently home to around 1.5 million people. For their people, the island is home, but Sumbawa is important for another reason as well. Mount Tambora—a volcano whose 1815 volcanic eruption was the deadliest and most powerful in history—is located on its northern half.

In early April of 1815, Mount Tambora changed the world. It caused a blast that registered a whopping 9 on the volcanic explosivity index. That is the highest in human history. Its eruption was so loud that it was heard by people who live on Sumbawa—an island located more than 3,000 kilometers away.

When Tambora erupted, it also caused 100 volcanoes elsewhere to erupt and set off the air. The ash caused complete darkness in Southeast Asia and high snow levels for several days. It disrupted all agriculture and killed an estimated 71,000 people in the area.

But the damage Tambora caused did not stop there. Over the next few months, volcanic ash and sulfur dioxide spread across the globe. This caused the year to be the coldest since 1850. Temperatures were so low that many crops failed and many people died. Many people also suffered from respiratory problems and other health issues.

When Tambora erupted, it also caused 100 volcanoes elsewhere to erupt and set off the air. The ash caused complete darkness in Southeast Asia and high snow levels for several days. It disrupted all agriculture and killed an estimated 71,000 people in the area.

Your Cousin, the Chimpanzee

Have you ever gone to the zoo and looked at a chimpanzee? It can be a fascinating and strange experience. When you look at a chimpanzee, it looks like a hairy little (they are called chimps). Like us, chimps live in groups, play together, and take care of each other. Sometimes they disagree with each other and fight like humans as well. Actually, it is not surprising that chimps and humans behave similarly. Chimpanzees are our closest living relatives.

Chimpanzees and humans have a common ancestor that lived six million years ago. Because of this, we share lots of our DNA with chimps and we both belong to the same scientific family, the hominidae family. Further evidence is that our skeletons are very similar to chimpanzees.

Like humans, chimps have groups of different relationships that go on at the same time. Some chimps are leaders in the group, while others follow directions. Some chimps are friends with each other while others are not. Friends often spend time together and do family members. Chimps (and other primates) are social animals and often form close and lasting relationships. In the human world, both friends and family members can be each other by sharing food, playing together, and growing up together.

Chimpanzees are very smart. They can use tools and solve problems. They can also learn to use sign language and understand some words.

The Burj Khalifa

A new wonder has recently appeared in the desert city of Dubai. It is the world's tallest man-made structure, and it's only eleven days old! It's called the Burj Khalifa. It stands 828 meters tall. It is the tallest building in the world. It is also the tallest freestanding structure in the world. It is the tallest building in the world. It is the tallest building in the world.

The construction of the Burj Khalifa began in 2004. Because of the building's great height, the architect and engineers faced many challenges. Early on, it was decided that the base of the Burj Khalifa would be "Y" shaped. The three arms of the Y would then support a hexagon-shaped tube in the center and give the building the strength it needed. Demonstrating the strength of the design, the Y's only 150-meter arms, which is just over 17% of the Burj Khalifa's total height.

The tallest of the construction workers was also faced by the Burj Khalifa's amazing height. In a other structure was built at 226 meters tall. It is also the tallest building in the world. It is the tallest building in the world. It is the tallest building in the world.

It's not only the Burj Khalifa's size that makes it so amazing. Inside are some of the most beautiful apartments and hotel rooms on the planet. The Armani Residences and the Armani Hotel occupy 25 floors in the tower itself of the building. There are also more than 1,000 guests of an amazing the interior. The lobby of the Burj Khalifa features a unique design to resemble the inside of a palm tree. The sculpture looks like falling water droplets but is in fact a gold-plated pyramid.

At this history and engineering masterpiece come at a price. The best rooms, apartments and other space are all very expensive—perhaps too expensive. In late 2010 people found out that only 10 of the Burj Khalifa's 100 apartments were occupied. Even the building's huge size, the tallest man-made structure in the world, will never see a fraction of return. One time will be, unfortunately, when it's ready to start. The Burj Khalifa has already been called Dubai's pride. There is no doubt that the Burj Khalifa will continue to be a small building in the Persian Gulf but a major tourist destination for millions of visitors and tourists.

2. Effective Reading Skill Practice

Various reading skills are practiced repeatedly throughout the series so students can consolidate their reading skills step by step.

Reading Skills
Scanning for Information
Understanding Words in Context
Making Inferences
Identifying Method
Identifying Purpose
Recognizing Restatement

Some reading skills are practiced using multiple choice TOEFL type questions.

During Reading

A. Scanning for Information Circle the correct answer.

1. Where did the circus originate?

- America
- England
- Australia
- Italy

2. Who was Joshua Purdy Brown?

- a man who made the circus very popular
- a man who bought the first circus in Australia
- a man who built a theater especially for circuses
- a man who was the first to use a lion

3. Circuses have changed a lot since give as a reason for what?

- The circus arenas have changed.
- The people's tastes have changed.
- The performers have changed.
- Circuses have become less popular.

4. Which sentence about the circus is true?

- Australian Circus OZ and Queen's Circus are still performing.
- In Roman times, the profession of circus was still changing.
- Chariot racing, dramatics, and acrobatics were part of the circus.
- The Coliseum in Rome was built for circuses.

5. Which sentence about the circus is true?

- Freak shows have almost disappeared.
- The circus is a popular form of entertainment.
- Jugglers and acrobats were part of the circus.
- The Coliseum in Rome was built for circuses.

C. Understanding Words in Context Circle the correct answer.

1. In line 13, what does the word *dazzling* mean?

- satisfying
- training
- impressing
- providing

2. In line 47, what does the word *predecessors* mean?

- people who were successful
- people who did the same job before
- people who failed at something
- people who started something

D. Making Inferences Circle the correct answer.

1. Line 47 states, "When the circus comes to town, it's no surprise that everyone's a fan." What can be inferred from this?

- Not everybody likes circuses.
- The circus is still very popular.
- The circus doesn't come to town very often.
- It's surprising that the circus still exists.

E. Identifying Purpose Circle the correct answer.

1. Why does the writer mention "Freak show" in paragraph 5?

- to explain how popular it was in the circus
- to show how circuses have changed over time
- to discuss the problems it caused
- to describe how people with abnormalities were treated in the 19th century

2. Why does the writer mention "Australia's Circus OZ" in paragraph 6?

- to show that some circuses don't use animals
- to discuss different circuses around the world
- to emphasize the importance of animal acts
- to talk about how to entertain people

F. Recognizing Restatement Circle the correct answer.

1. Which of the following sentences best restates the highlighted information in line 12?

- the circus was moved to other places by entertainers
- entertainers continued to learn, teach, and display circus skills
- the circus was changed by entertainers
- entertainers survived in the circus

Reading Skills
Identifying Main Ideas
Sequencing
Compare and Contrast
Classification
Identifying Cause and Effect
Identifying Fact and Opinion
Identifying Fact
Identifying Ideas For and Against

Some reading skills are practiced using graphic organizers so they can be understood easily.

B-1. Organizing Information: Compare and Contrast
Complete the chart:

	In Roman Times	After the Fall of the Roman Empire
Main acts	Main acts included chariot racing, _____ and _____.	Main acts included _____ and _____.
Venue	The venues were open-air.	The venues are now public spaces and _____.

Reading Skill Tip: When you compare and contrast, you explain the similarities and differences between two or more things.

B-2. Organizing Information: Sequencing
Complete the chart:

Ancient Roman Times	The art form of the circus _____.
After Roman Times	The circus was kept alive by who traveled around Europe.
1400s	Circuses performed in _____.
1825	Joshua Purdy Brown used a _____ as a _____.
19 th Century	A new type of circus was _____ in America. They were called _____.
Modern Times	Circus companies were criticized for _____.

Reading Skill Tip: Organizing the main events of the passage in chronological order can help you to understand the timeline.

Lesson 1.35

3. Cumulative Vocabulary Practice

Each target word is practiced five times throughout the student book and the supplementary vocabulary worksheet. This cumulative practice will help students to acquire the new vocabulary easily.

The image shows three overlapping pages from a student book titled 'Arts: The Circus'. The pages contain various vocabulary practice activities:

- Page 1 (Left):** 'Pre-Reading' section with a 'Discussion' box containing questions about circuses. Below it is a 'Key Vocabulary' section with a list of words and their definitions.
- Page 2 (Middle):** 'After Reading' section with 'Vocabulary Practice' (fill-in-the-blanks), 'Synonyms and Antonyms' (fill-in-the-blanks), and 'Writing Practice' (a short paragraph to write).
- Page 3 (Right):** 'Vocabulary Review' section with a 'Crossword Puzzle' and a 'Word Search'.

4. Systematic Four-skills Practice

All four language skills (reading, writing, listening, speaking) are practiced in every unit so students can improve their English as a whole.

Unit Structure

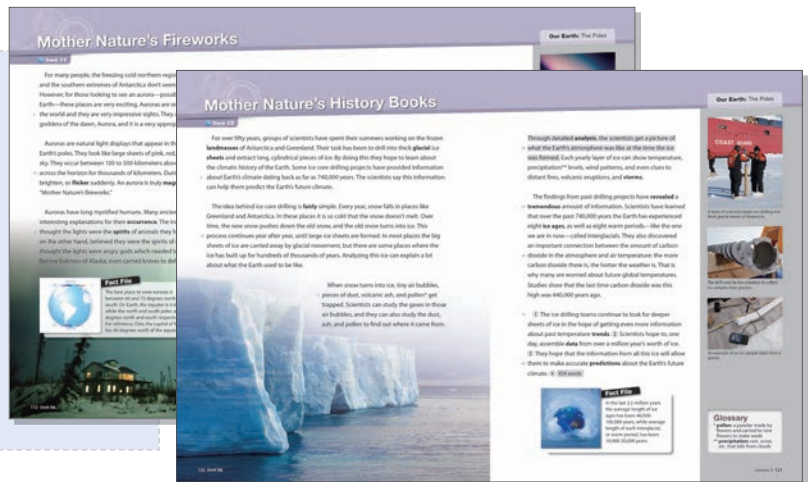
1. Unit Opening

Colorful pictures and illustrations not only grab students' attention but also get them interested in reading.



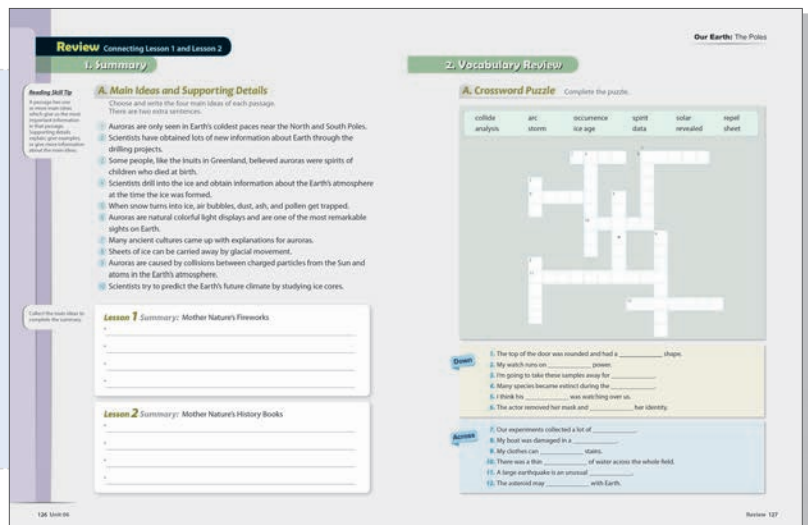
2. Two Consecutive Lessons

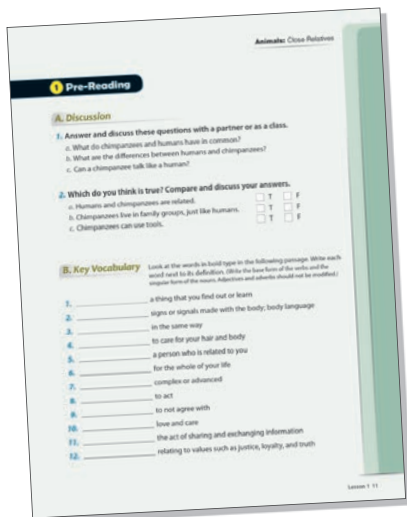
In each unit, students read two related passages from the same subject area. They provide students with content-based vocabulary and, at the same time, help students develop greater understanding of the topic.



3. Review - Connecting Lesson 1 and Lesson 2

The unit review section provides students an opportunity to review and reinforce what they have read and learned.





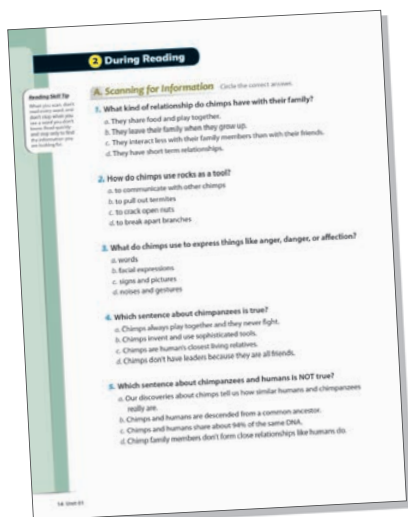
1. Pre-Reading

Warm up Discussion

Discussion questions provide students with some background knowledge as well as an opportunity to predict what they are going to read.

Key Vocabulary

Twelve key words are introduced in each lesson.



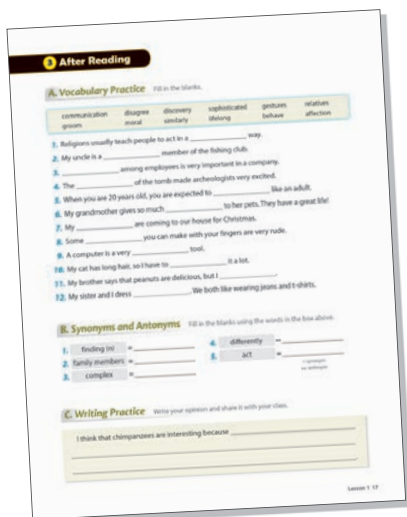
2. During Reading

Various activities to practice reading skills

Reading skills are recycled throughout the series, so students can practice repeatedly and consolidate their learning.

Fact Files

Fact files not only provide additional information, but they also make the lesson more interesting.



3. After Reading

Vocabulary Practice

Key words are practiced in different activities.

Discussion

This activity provides students with a chance to express their personal opinions.

Writing Practice

In this activity, students' opinions are expressed in writing.

READING
PLANET



Unit 1

Animals: Working Together






Bees work together to collect food from a flower. Like humans, animals work together to help each other out.



Lesson 1

Busy Bees

Interesting Facts about Honeybees

-  Honeybees have been around for 30 million years
-  The honeybee's wings create the buzzing sound
-  Honeybees can fly up to 10 km at 25 kmh
-  Honeybees communicate by dancing
-  Young honeybees are taught how to make honey by the older and more experienced honeybees

1 Pre-Reading

A. Discussion

1. Answer and discuss these questions with a partner or as a class.

- Why do you think the title is *Busy Bees*?
- Do you often see bees in the area where you live?
- What kind of work do bees do?

2. Which do you think is true? Compare and discuss your answers.

- Worker bees are all male. T F
- Some bees don't have stingers. T F
- There is only one queen bee in a beehive. T F

B. Key Vocabulary

Look at the words in bold type in the following passage. Write each word next to its definition. (Write the base form of the verbs and the singular form of the nouns. Adjectives and adverbs should not be modified.)

- _____ to become an adult
- _____ as a group
- _____ a flower or group of flowers
- _____ the home of a group of bees
- _____ to emerge from an egg
- _____ the sweet liquid that is produced by flowers
- _____ very carefully; softly; without weight
- _____ a sharp part of the bee's body that is designed to go into skin and cause pain
- _____ a small particle
- _____ to hit
- _____ the powder that comes from flowers used to make new flowers
- _____ creatures living together with roles, norms, and rules

Busy Bees

Track 01

A black and gold honeybee walks **delicately** over the surface of a clover **blossom**. **Grains** of clover **pollen** attach themselves to her legs, and she quickly flies on to the next flower. Why is she so busy? It's because she is collecting food for her family. **Beehives** contain worker bees, drone bees, and a queen bee, but only the oldest
5 workers leave the hive to find food. This busy female honeybee is a small part of a much larger **social structure**.

In the social structure of a beehive, worker bees are very important. Depending on their age, the workers must clean the hive, feed the larvae, build and repair the hive, and collect food. The youngest workers take care of the cleaning and feeding, and
10 the middle aged workers make beeswax for hive building and repair. Meanwhile, the oldest workers, called foragers, are outside the hive collecting food. Despite their specialized jobs, all workers band together to defend the hive. Likewise, all workers process pollen and **nectar** to make honey and other bee foods. Lastly, some special workers lay eggs. These eggs **hatch** into drones.



Fact File

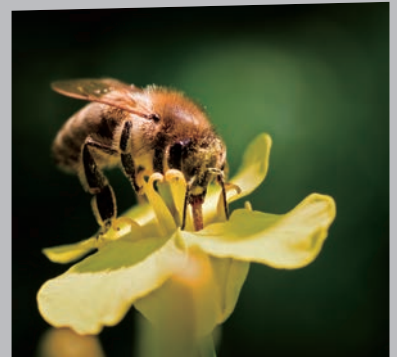
Humans have kept bees in artificial hives for a long time. Recently, archeologists discovered a picture on the walls of an Egyptian temple that shows workers blowing smoke into beehives. They say that this picture was drawn over 4,400 years ago.

15 Drones are male bees and they are bigger than the workers. They do not collect pollen or take care of the hive. They cannot even defend the hive because they don't have **stingers!** A drone's only job is to breed with the queen so she can produce eggs. The eggs hatch into worker bees
20 or new queens. There are about 200 drones in a typical summer beehive, compared to about 40,000 workers.

The queen bee is the center of all hive life. There is only one queen and she is the mother of every bee in the hive. All the other bees live to serve and protect her. The queen
25 is much bigger than the other bees. She lives at the hive's center and spends her time laying eggs. **She is fed and cared for by worker bees.** Most of the eggs she lays develop into worker bees. Sometimes though, she lays an egg that becomes a new queen.

30 When a queen larva **matures** into a new queen bee, she, along with a large group of worker bees, leaves her old home to start a new hive elsewhere. The new hive will function like the old one with workers, drones, and the queen all working together to keep everything running
35 smoothly. It's amazing, and scientists still don't know how the bees understand their roles.

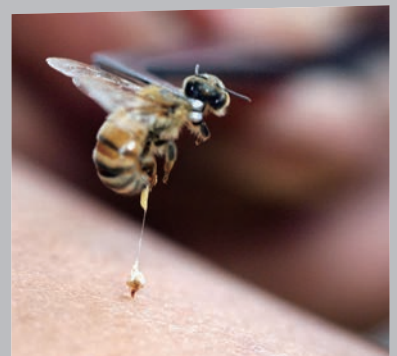
The way that bees organize their society is very interesting. Individually they are small and vulnerable, but **collectively** they can deal with many threats and
40 environmental conditions. The next time you see a bee, please don't **swat** at it. Remember that they are working hard to feed their family. 458 words



Bees have a very important relationship with flowers. Flowers give the bees food, and bees help new flowers grow.



Bees collect nectar and turn it into honey. Here the bees store the honey in honeycombs.



Ouch! When bees feel threatened, they may use their stinger to protect themselves.

Fact File

In the last 10 years, bees have been disappearing in many places. When scientists investigated the disappearance, they found the hive and the queen but no bees. They call this *colony collapse disorder* and it is very worrying.

2 During Reading

Reading Skill Tip

When you scan, don't read every word, and don't stop when you see a word you don't know. Read quickly and stop only to find the information you are looking for.

A. Scanning for Information Circle the correct answer.

1. Which bees leave the hive to find food?

- a.* the queen bees
- b.* the youngest workers
- c.* the middle aged workers
- d.* the oldest workers

2. What do drones do?

- a.* They clean the hive.
- b.* They breed with the queen.
- c.* They defend the hive.
- d.* They build and repair the hive.

3. What happens when there is a new queen?

- a.* The new queen leaves the hive to start a new hive.
- b.* The old queen leaves the hive to start a new hive.
- c.* The new queen and the old queen fight.
- d.* The new queen becomes a worker.

4. Which sentence about bees is true?

- a.* Drones are smaller than workers.
- b.* The queen is much smaller than the other bees.
- c.* Drones don't have stingers.
- d.* Bees use honey to build and repair the hive.

5. Which sentence about bees is NOT true?

- a.* The youngest worker bees collect food.
- b.* The queen bee is the mother of every bee in the hive.
- c.* Drones are male bees.
- d.* There are more workers than drones in a hive.

B-1. Identifying Main Ideas

Complete the chart using the options below. Write one sentence in each box.

<i>Main Idea</i>	
<i>Paragraph 2</i>	<hr/> <hr/>
<i>Paragraph 4</i>	<hr/> <hr/>
<i>Options</i>	
<ul style="list-style-type: none"> ▪ The queen bee is the center of all hive life. ▪ Workers band together to defend the hive. ▪ Some workers lay eggs and they hatch into drones. ▪ The queen bee's eggs develop into worker bees. ▪ Workers are very important because they do many different jobs. ▪ Worker bees care for the queen bee. 	

Reading Skill Tip

Every paragraph has a topic sentence. This sentence contains the main idea. Often, but not always, the topic sentence is the first sentence of the paragraph.

B-2. Organizing Information: Classification

Write the number under the correct heading. (Some answers are used more than once.)

<i>Worker Bees</i>	<i>Drone Bees</i>	<i>Queen Bees</i>
<ol style="list-style-type: none"> ① male ② female ③ process pollen and nectar to make honey ④ live at the hive's center ⑤ breed with the queen ⑥ take care of the hive ⑦ don't have stingers ⑧ lay eggs ⑨ collect food 		

Reading Skill Tip

It is always possible to group different things according to their common elements. Try to put similar things together under the correct heading.

Reading Skill Tip

Think about how the target word is related to the topic of the passage. Then look at the words around the target word to guess its meaning.

Reading Skill Tip

While making inferences, you combine the information in the passage with your general knowledge.

Reading Skill Tip

Read carefully and find out how the writer explains or accomplishes something in the paragraph.

Reading Skill Tip

Read carefully and choose the restatement that best simplifies the highlighted passage. Your goal should be to leave the meaning unchanged and to include all important information.

C. Understanding Words in Context Circle the correct answer.

1. In line 8, what does the word *larvae* mean?
a. queens b. babies c. hive d. drones
2. In line 12, what do the words *band together* mean?
a. work individually b. sing together
c. go outside d. work together

D. Making Inferences Circle the correct answer.

1. Line 7 states, "In the social structure of a beehive, worker bees are very important." Why do you think worker bees are important?
a. They are all female. b. They do most of the work.
c. They are the strongest. d. Their eggs hatch into drones.
2. Line 40 states, "the next time you see a bee, please don't swat at it." Why do you think the writer says that?
a. Bees are similar to people, with families, roles, and responsibilities, so we should respect them.
b. Bee stings can be dangerous, so it's important to leave bees alone and not try to kill them.
c. Swatting a bee can anger the queen bee and this could create problems for a person.
d. Bees are very strong and swatting at a bee would not kill or hurt it.

E. Identifying Method Circle the correct answer.

1. How does the writer introduce the social structure of bees in the first two sentences of paragraph 1?
a. by explaining why bees are so busy
b. by describing a worker bee and its job
c. by describing physical features of bees
d. by explaining what happens when a bee moves from a flower

F. Recognizing Restatement Circle the correct answer.

1. Which of the following sentences best restates the highlighted information in line 26?
a. The queen bee feeds and cares for worker bees.
b. Worker bees feed and care for the queen bee.
c. The queen bee and worker bees take care of each other.
d. The other bees take care of the queen and workers.

3 After Reading

A. Vocabulary Practice

 Fill in the blanks.

hatched	blossoms	stingers	beehive	mature (v)	pollen
nectar	swat	grains	delicately	collectively	social structure

1. When bees sting, they leave their _____ behind.
2. The mover _____ carried the lamp, so he would not break it.
3. I think families should make decisions _____.
4. The yellow powder in the flower is _____.
5. After six weeks, the eggs _____ and the babies emerged.
6. I like spring because the _____ on the trees look beautiful.
7. Those flies are very annoying. I want to _____ them.
8. A long time ago, the most common _____ for humans were tribes.
9. The sweet liquid in a flower is called _____.
10. A colony of bees live in a _____.
11. Children slowly _____ into adults.
12. There are billions of sand _____ on a beach.

B. Synonyms and Antonyms

 Fill in the blanks using the words in the box above.

1. hit = _____
 2. roughly ↔ _____
 3. particle = _____
 4. individually ↔ _____
 5. social organization = _____
- = synonym
↔ antonym

C. Writing Practice

 Write your opinion and share it with your class.

I think the social structure of bees is (very interesting / not very interesting) because ____

_____.