STUDENT BOOK

Reading is a thinking process!



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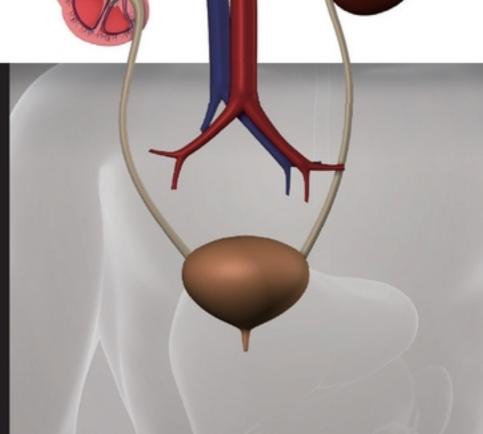


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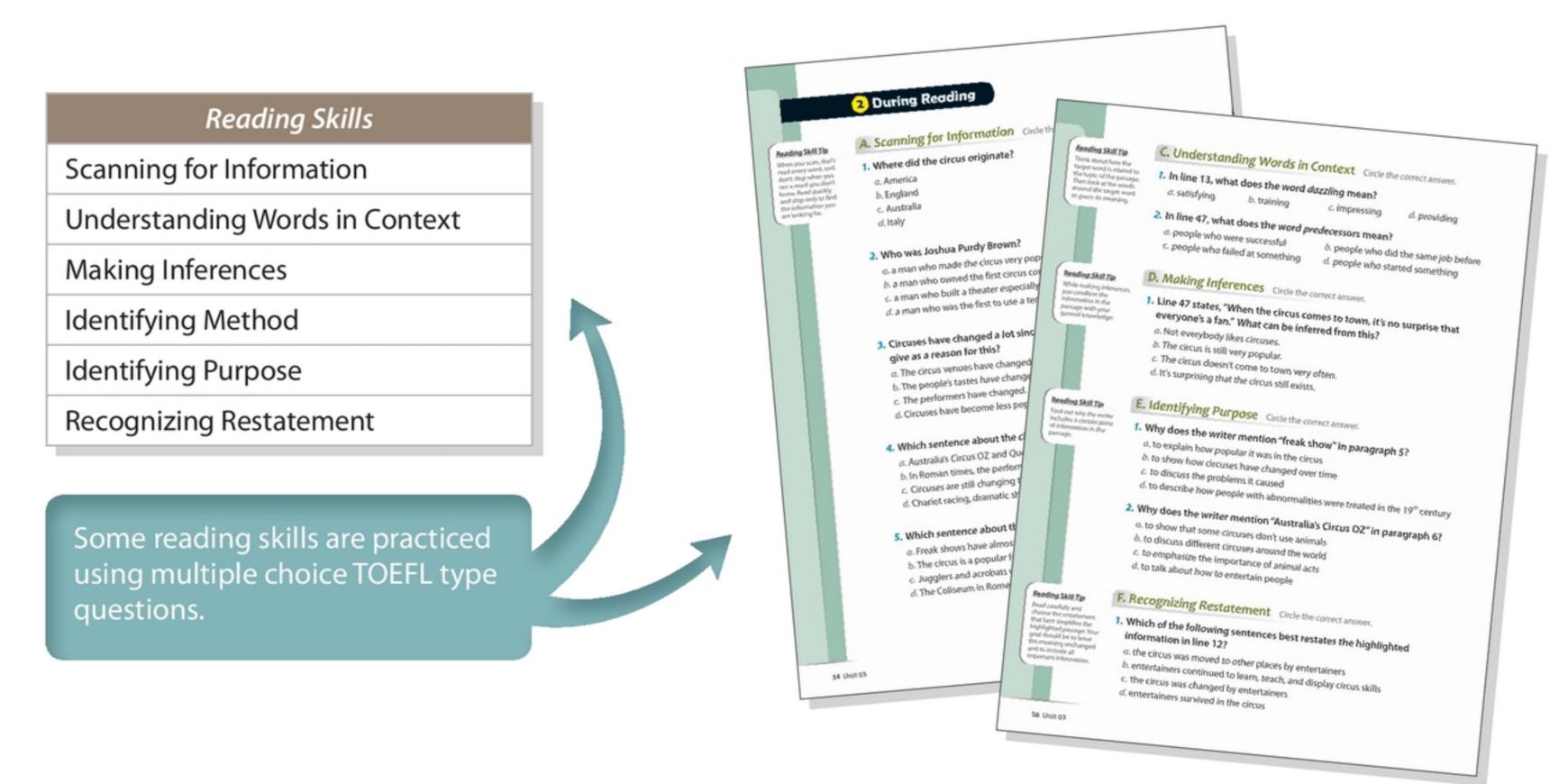
1. High-Interest Passages

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.

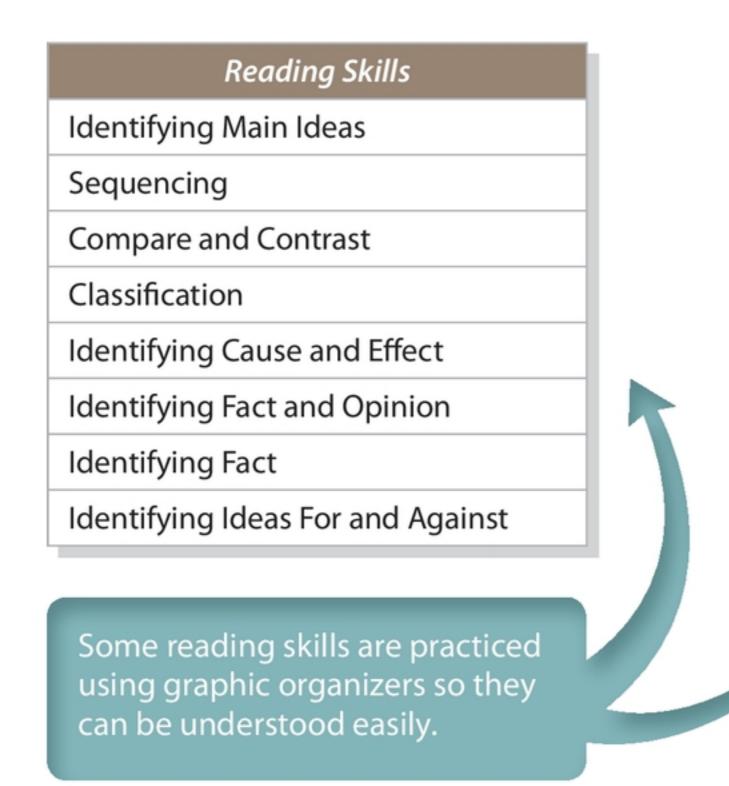


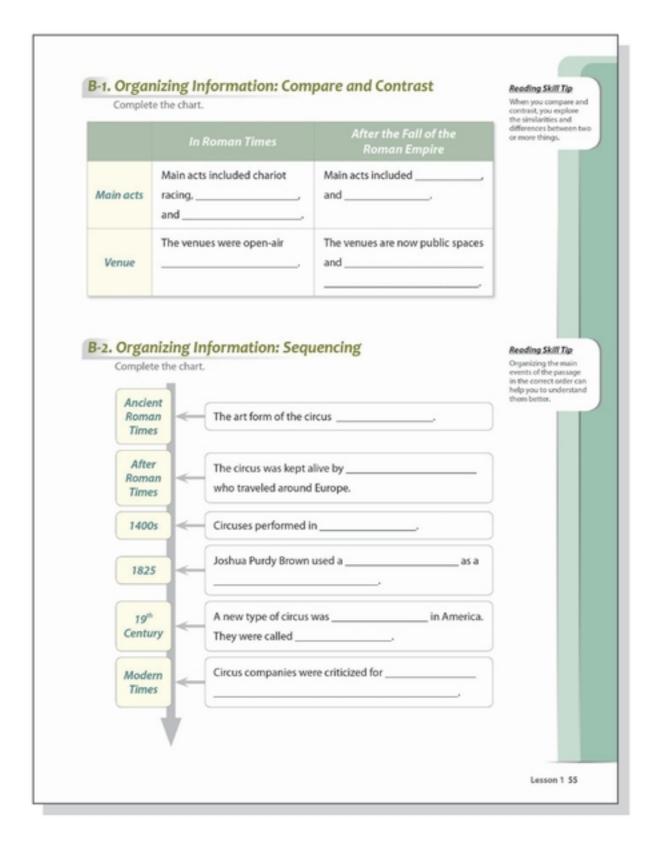
2. Effective Reading Skill Practice

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



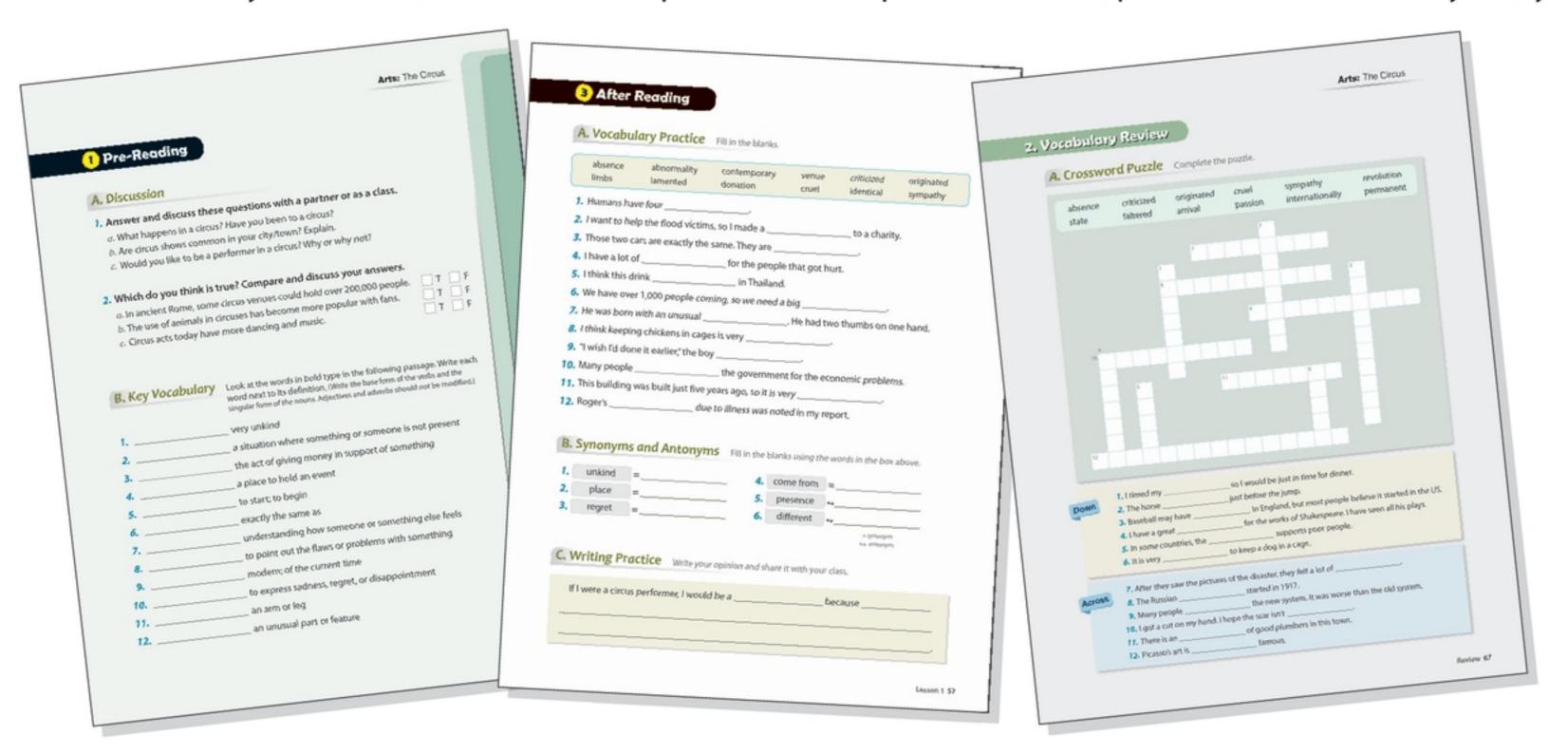






3. Cumulative Vocabulary Practice

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.



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

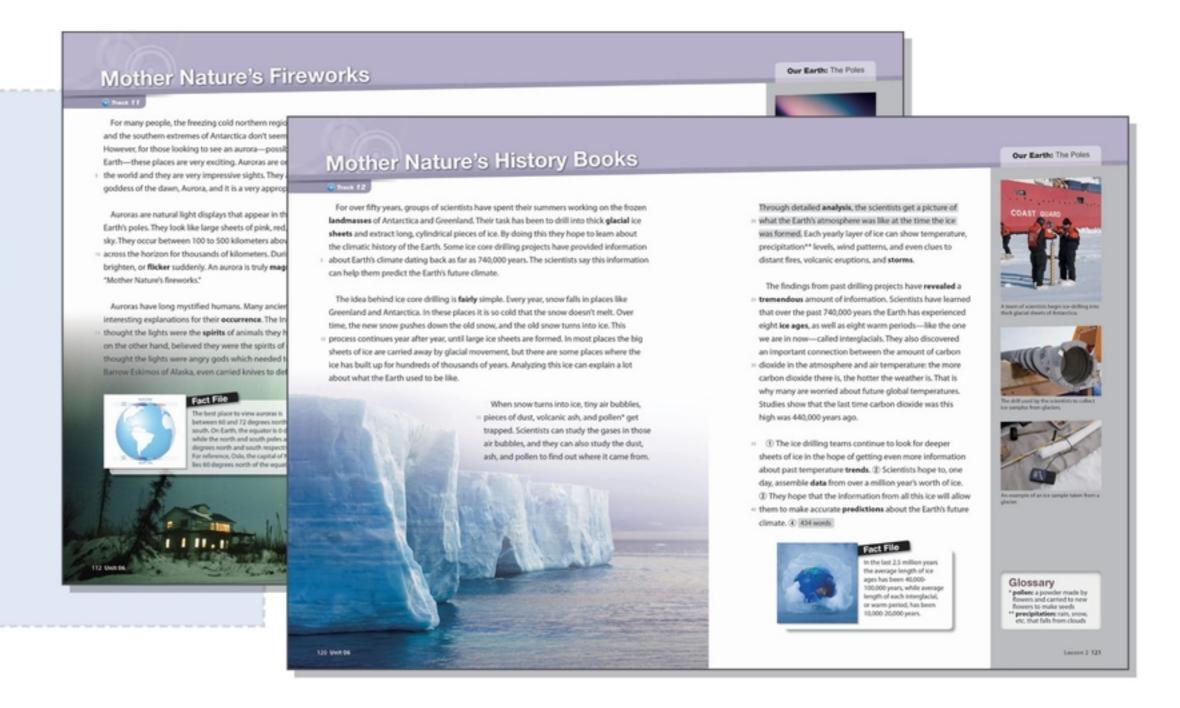
1. Unit Opening

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



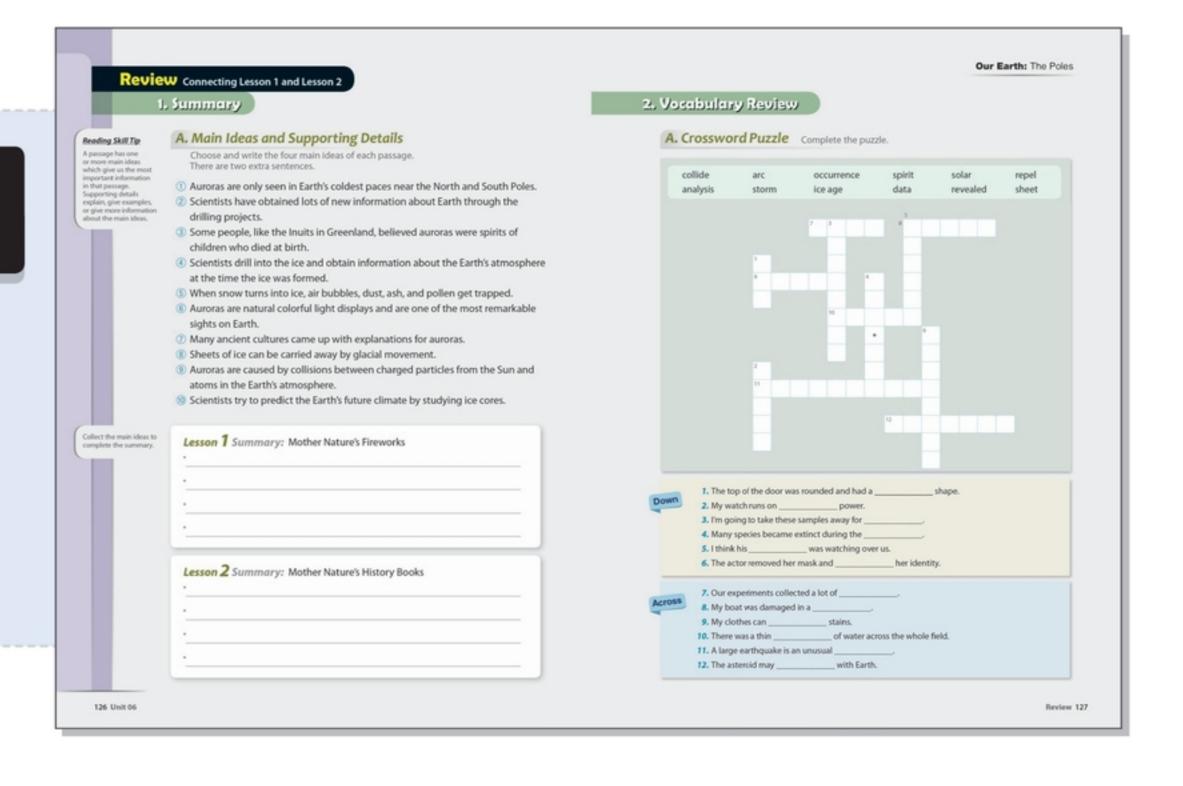
2. Two Consecutive Lessons

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.



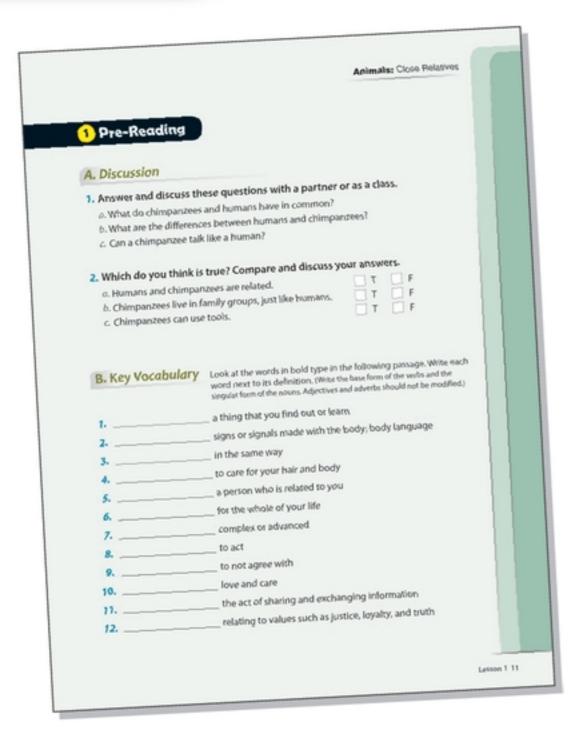
3. Review - Connecting Lesson 1 and Lesson 2

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



Lesson Flow





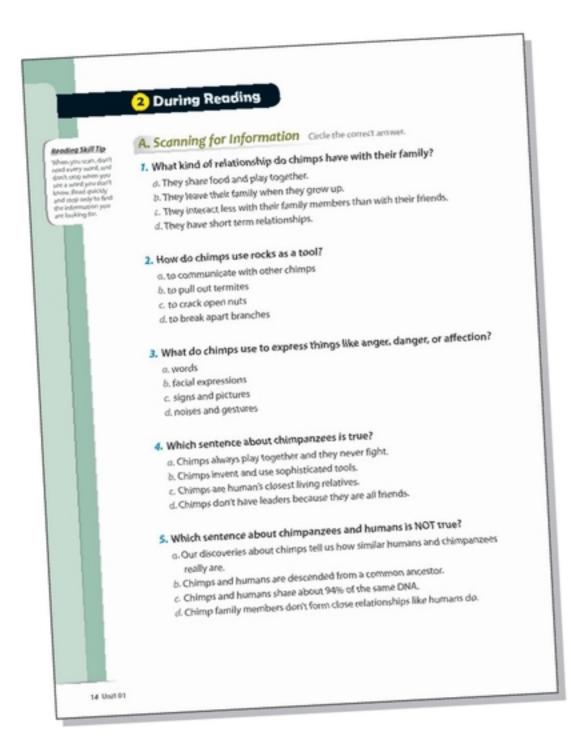
1. Pre-Reading

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.



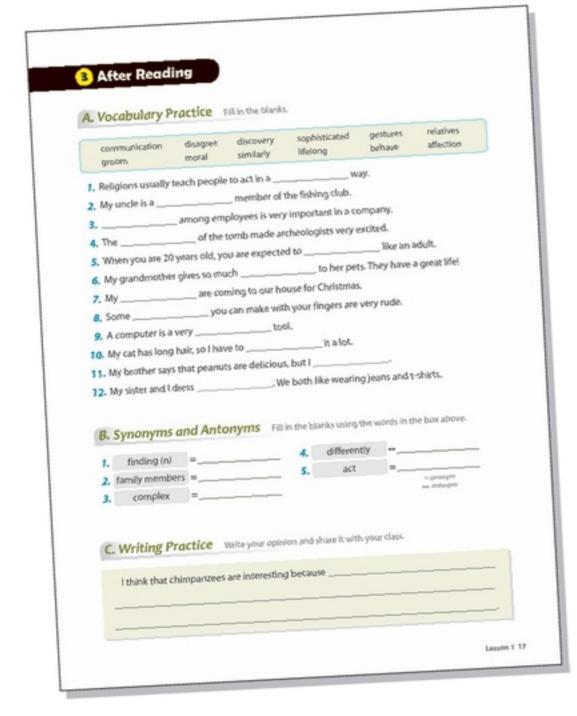
2. During Reading

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.







1 Pre-Reading

10. _____ to hit

-	-)	
A.		10		IC	CI		n
7.	$\boldsymbol{\omega}$		LL	c_{L}	21	U	

71. Discussion	
a. Why do you think the	es in the area where you live?
2. Which do you think is	s true? Compare and discuss your answers.
a. Worker bees are all mb. Some bees don't havec. There is only one que	e stingers.
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.)
1.	to become an adult
2	as a group
3.	a flower or group of flowers
4.	the home of a group of bees
5.	to emerge from an egg
6.	the sweet liquid that is produced by flowers
7.	very carefully; softly; without weight
8.	a sharp part of the bee's body that is designed to go into skin and cause pain
9	a small particle

11. _____ the powder that comes from flowers used to make new flowers

12. _____ 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 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 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.



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 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 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.

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 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 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.

Main Idea				
Paragraph 2				
Paragraph 4				

Options

- 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.

B-2. Organizing Information: Classification

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

Worker Bees	Drone Bees	Queen Bees			
1 male					
2 female					
3 process pollen and nect	ar to make honey				
4 live at the hive's center					
(5) breed with the queen					
6 take care of the hive					
① don't have stingers					
8 lay eggs					
9 collect food	collect food				

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.

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

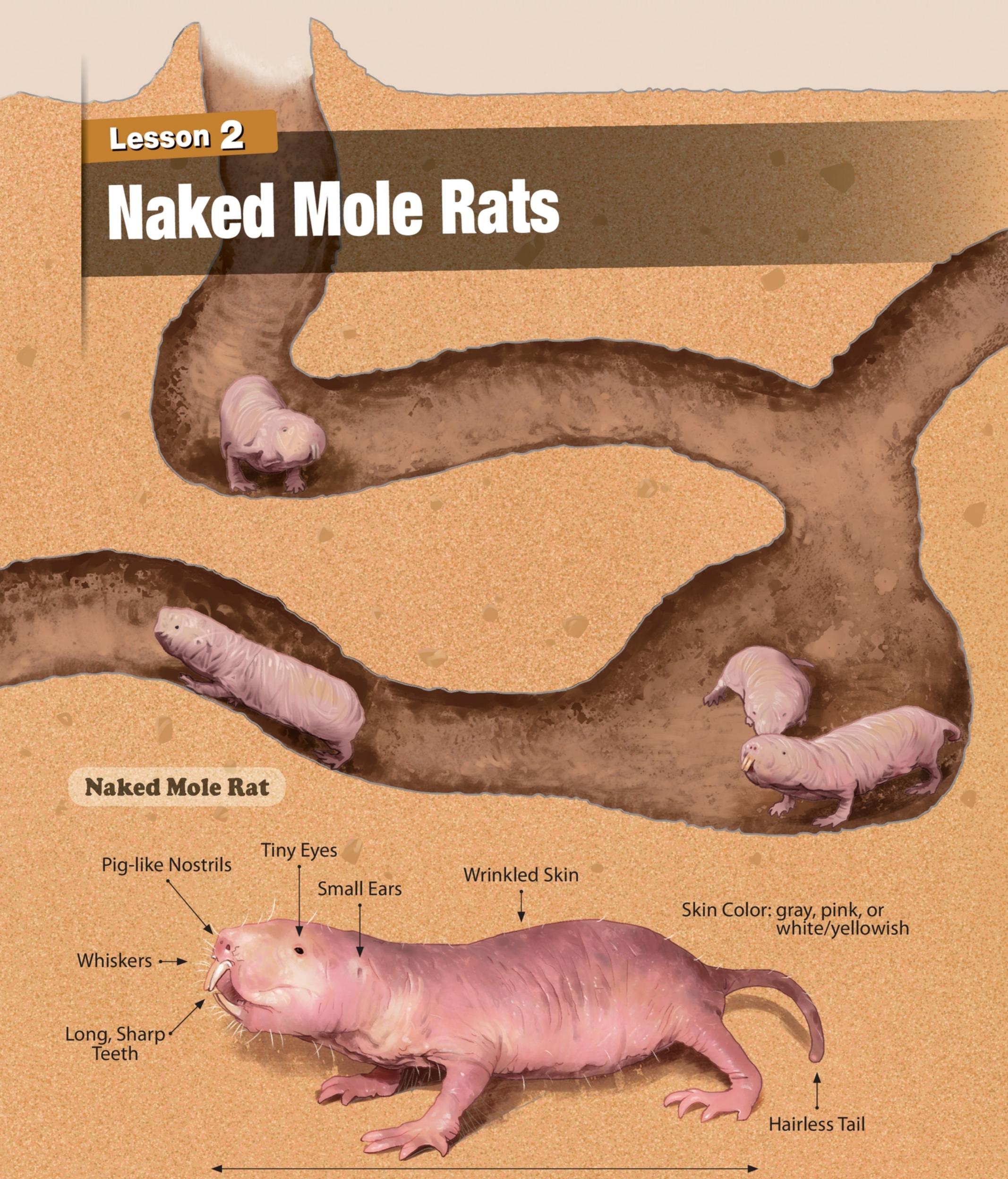
F. Recognizing Restatement Circle the correct answer.

- 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 nectar	blossoms swat	stingers grains	beehive delicately	mature (v) collectively	pollen social structure
1.	When bees st	ting, they leave	e their	b	ehind.	
2.	The mover _		carried t	he lamp, so he v	vould not break i	t.
3.	I think familie	es should make	e decisions _			
4.	The yellow po	owder in the fl	ower is	·		
5.	After six wee	ks, the eggs		and the ba	abies emerged.	
6.	I like spring b	ecause the		on the tree	es look beautiful.	
7.	Those flies ar	e very annoyir	g. I want to		them.	
8.	A long time a	go, the most c	ommon		for hur	mans were tribes.
9.	The sweet liq	juid in a flower	is called		_•	
10.	A colony of b	ees live in a		·		
11.	Children slov	vly	into	adults.		
12.	There are bill	ions of sand _		on a beac	h.	
B.	Synonym	s and Anto	nvms Fi	ill in the hlanks us	sing the words in th	ne hox ahove
	- Jiioniyiii		11,711.5	in in the blanks as	mig the words in the	ic box above.
1.	hit			4. indiv	⁄idually ↔	
2.	roughl	y		5. social or	ganization =	
<i>3</i> .	particl	e =				= synonym ↔ antonym
C.	Writing P	ractice w	rite your opin	ion and share it v	vith your class.	
	1 4 4 4 4 4 4 4 4 4 4	. a: a l. a t a t	o f la a a a i a /	o.w i.a.t.a		in a \ la a a a
	i think the sc	ocial structure (or bees is (Ve	ery interesting /	not very interest	ing) because
_						



1 Pre-Reading

A. Discussion

- a. Have you seen a picture of a naked mole rat before?
- b. Why do you think they are called naked mole rats?
- c. Do you think naked mole rats are insects or mammals? Why?

2. Do you agree or disagree? Compare and	d discuss your answ	ers.
a. The naked mole rat is very ugly.	Agree	Disagree

b. The naked mole rat moves very slowly.

Agree	Disagree
Λ	D:

c. Naked mole rats are very good at digging.

Agree	Disagree
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B.	Key	Vocabu	ulary	Lo
----	-----	--------	-------	----

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.)

- 1. _____ the direction that is in front of you
- 2. _____ to drink milk from a breast
- 3. _____ slim; thin; lacking fat and muscle
- 4. _____ a group of animals or humans that live together
- 5. _____ a long and sharp fingernail or toenail of an animal
- 6. _____ to close tightly in order to keep something in or out
- 7. _____ the duty to take care of someone or something
- 8. _____ varied; existing in many forms
- 9. _____ bare; not wearing any clothes
- 10. _____ the most ugly; the worst looking
- 11. _____ all the interactions and communications between a group of living beings
- 12. _____ a group of baby mammals that are born at the same time to the same mother

Naked Mole Rats

Track 02

Whoa, what's that? It's a **naked** mole rat! The naked mole rat is certainly one of the **ugliest** mammals on the planet. Naked mole rats have tiny eyes, no hair, **skinny** legs, and huge teeth that stick out of their mouths. While their appearance alone is enough to make them interesting, naked mole rats have something else that makes them fascinating to scientists and students of animal behavior: their **social lives**.

Although they are mammals, naked mole rats have a social structure that is more like that of an insect **colony**. Like bees or ants, there are different types of naked mole rats and each type has a very specific job. There are mole rat workers, mole rat drones, and a mole rat queen. Mole rats are the only mammal that live in this type of group.

Worker mole rats do just what their name suggests—they work. Because mole rats live in underground burrows, one of the things the worker mole rats are responsible for is digging the tunnels. They use both their **claws** and their giant teeth to help them move the soil. Luckily for mole rats they have special mouths. Their lips actually **seal** behind their teeth so they don't swallow dirt when they are digging.



In addition to digging tunnels, worker rats have to take care of the young rats in the colony, find food, and remove waste. They are always busy, so they have to move fast. They have learned to move both backwards and **forwards** through their tunnels with surprising speed. One thing worker rats do not do is breed. However, if the queen rat dies, one of the worker rats must take her place. This usually results in a fierce battle between female workers to see who will become the next queen. As with bees, males only have a small role to play in the colony. The **responsibility** of these drone mole rats is to breed with the queen.

The queen is the center of life in the colony. She is several times bigger than the workers or the drones. She usually breeds once a year and gives birth to a **litter** of 12 to 20 young, which are called pups. The pups **nurse** from the queen for about a month before their care and feeding is taken over by the workers of the colony.

- Before scientists studied naked mole rats, people thought that the social structure of insects was completely different from the social structure of mammals. Thanks to the naked mole rat, they now know that this is not the case. The ugly little naked mole rat has taught us that mammal behavior is
- 40 far more **diverse** than we once thought. 450 words



Naked mole rats come from East Africa and primarily Kenya.



Some people believe the naked mole rat is ugly. However, others believe it's cute and can be used in cartoons.



Fact File

As with bees, mole rat workers are divided into groups, with each group having a different job to do. Some workers are tunnellers. They expand the tunnel network and keep the tunnels clear. Others are soldiers. They protect the group from outside predators.



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 can't be found on naked mole rats?

- a. tiny eyes
- b. hair
- c. skinny legs
- d. huge teeth

2. What do naked mole rats use to move the soil when they dig?

- a. head and mouth
- b. lips and teeth
- c. teeth and claws
- d. tail and feet

3. What are the pups?

- a. They are the workers.
- b. They are the male rats.
- c. They are the queens.
- d. They are the young rats.

4. Which sentence about naked mole rats is true?

- a. A naked mole rat's colony is completely different from a bee colony.
- b. Naked mole rats can only move forwards.
- c. If the queen dies, one of the pups takes her place.
- d. Different types of naked mole rats have different jobs.

5. Which sentence about naked mole rats is NOT true?

- a. They live in underground burrows.
- b. Their mouth is specially designed so that they don't swallow dirt.
- c. Males have a lot of jobs in the colony.
- d. The queen is the center of the life of the colony.