

Answer Key

Unit 1 Little by Little Does the Trick

Build Background p.6

1.	Q	What is the ant doing?
	A	It is carrying a leaf.
2.	Q	Is this an easy job for the ant?
	A	It seems hard for the ant. The leaf is much bigger than the ant.
3.	Q	What do you do when you face a challenge?
	A	I try to do my best and not give up.

Vocabulary p.7

B.

1. pebble	2. ignore	3. meadow	4. poke
5. reflection	6. deserve	7. thirst	8. pitcher

C.

1. through	2. of	3. into
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Make Connections

What did the crow do to overcome her thirst?

ESSENTIAL QUESTION

The crow jumped down and used her beak to pick up the pebble. She flew back to the pitcher and dropped the pebble into the water. The pebble fell into the pitcher, hitting the water with a plop. Then she saw another pebble nearby. She picked up this pebble and dropped it into the pitcher, too. She did this over and over again. Slowly, the water level began to rise.

The crow worked all day, and she forgot about her fear of the farmer. Pebble after pebble dropped from her beak and into the water. Finally, she was able to poke her beak into the cool water and drink.

Comprehension Check p.10

A.

1. b	2. c	3. c	4. a	5. b
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B.

1. True	2. Not Given	3. False
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C.

1.	He put the pitcher out to collect any drops of rain that might drip through the roof.
2.	She realized that the water level was too low for her beak to reach.

Comprehension Strategy p.11

Step 1

The crow	<ul style="list-style-type: none">• She flew back to the pitcher and dropped the pebble into the water.• She saw another pebble nearby.• She did this over and over again.
The pitcher	<ul style="list-style-type: none">• Another pebble fell into the pitcher, too.• The water level began to rise.

Step 2

used her beak to pick up the pebble and dropped the pebble into the water, The water level began to rise

Comprehension Skill p.12

Problem	The water level was too low for the crow's beak to reach.
Solutuon	The crow used her beak to pick up the pebble and dropped it into the water. She did this over and over again. The water level began to rise and she was able to drink the cool water.

Summary p.13

water pitcher, very thirsty, too low, dropped it, to rise, deserved the water

Vocabulary Review p.13

A.

1. meadow	2. pebbles	3. poked	4. deserves
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B.

1. paid no attention to	2. image	3. jug
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McGraw Hill

Answer Key

Unit 2 The Dragon Problem

Build Background p.14

1.	Q	What are the boy and the girl doing?
	A	They are making a robot.
2.	Q	Where do they get their ideas?
	A	They get their ideas from a book. They get their ideas from recyclable materials.
3.	Q	Where do you get your ideas?
	A	I usually get an idea from the Internet.

Vocabulary p.15

B.

1. victory	2. brainstorm	3. carve	4. swoop
5. mutter	6. glare	7. choke	8. frantically

C.

1. in	2. of	3. away
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<h3>Make Connections</h3> <p>Talk about where Liang's idea for scaring the dragon came from.</p> <p>ESSENTIAL QUESTION</p>	<p>Liang started to brainstorm ideas. Nearby, children were playing with the toy dragons he had made.</p> <p>"Why not carve a giant dragon to scare away the real dragon?" asked one child.</p> <p>"That's a great idea!" shouted Liang. He rushed home and worked frantically for days. He made a huge dragon's head.</p>
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Comprehension Check p.18

A.

1. c	2. c	3. b	4. a	5. b
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B.

1. True	2. False	3. Not Given
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C.

1.	He knew a lot about dragons because one lived nearby in a mountain cave.
2.	The Emperor announced that the person who got rid of the dragon would marry Princess Peng.

Comprehension Strategy p.19

Step 1

Prediction 1	
Prediction 2	✓
Prediction 3	

Step 2

(c)

Comprehension Skill p.20

Event 1	Liang made a huge dragon's head.
Event 2	Liang put the huge dragon's head near the cave and gave a loud roar.
Event 3	The dragon saw the huge dragon's head and flew away.
Event 4	The villagers celebrated Liang's victory, and Liang married the princess.

Summary p.21

swooped down, got rid of, huge dragon's head, dragon's cave, glaring at, happily ever after

Vocabulary Review p.21

A.

1. brainstorm	2. muttered	3. victory	4. swooped
---------------	-------------	------------	------------

B.

1. glaring	2. choked	3. frantically
------------	-----------	----------------

Answer Key

Unit 3 The Talent Show

Build Background p.22

1.	Q	What do you think the girl is whispering to the other girl?
	A	She may be speaking ill of others. She may be telling her a secret.
2.	Q	How would you feel if you were sitting near these two girls?
	A	I would feel embarrassed and upset.
3.	Q	Have you ever done something that hurt someone's feelings?
	A	Yes, I have. I told a lie that hurt my friend's feelings. Then I felt bad and apologized.

Vocabulary p.23

B.

1. juggle	2. interrupt	3. act	4. hesitate
5. advise	6. solo	7. responsible	8. resentful

C.

1. up	2. up	3. for
-------	-------	--------

<p>Make Connections</p> <p>Talk about how Tina's actions affected Maura.</p> <p>ESSENTIAL QUESTION</p>	<p>I really wanted to win the talent show, but with my own act. We always did what Tina wanted. I felt <u>resentful</u> that she decided everything. In math class, I thought of how to talk to Tina.</p> <p>When I got home, I called Tina and told her that I wanted to do my juggling act. <u>She didn't say much before we said good-bye and hung up. I spent all night worrying that she was mad at me.</u></p> <p>The next day, I was amazed as Tina happily told me about a <u>solo</u> act she had come up with. <u>But the biggest surprise came later when we played the game I chose!</u></p>
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Comprehension Check p.26

A.

1. a	2. c	3. a	4. b	5. c
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B.

1. Not Given	2. False	3. True
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C.

1.	Maura felt resentful that Tina decided everything.
2.	She was glad that she listened to her grandma because she could stand up for herself and do her own act.

Comprehension Strategy p.27

Step 1

Prediction 1	✓
Prediction 2	✓
Prediction 3	

Step 2

(a), (b)

Comprehension Skill p.28

Problem	Maura always does what Tina wants.
Event	Maura told Grandma about the talent show.
Event	Grandma advised Maura to tell Tina the truth.
Solutuon	Maura called Tina and told her that she wanted to do her juggling act.

Summary p.29

an act together, decided everything, tell the truth, mad at her, solo act, was glad

Vocabulary Review p.29

A.

1. hesitated	2. advised	3. solo	4. responsible
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B.

1. performance	2. stopped	3. angry
----------------	------------	----------

Answer Key

Unit 4 A World of Change

Build Background p.30

1.	Q	What is happening in the picture?
	A	There is a fire in the forest.
2.	Q	How do situations like these affect the people who live nearby?
	A	People living nearby can lose their homes. They need to go to a safe place.
3.	Q	What other things do people have to do during natural disasters?
	A	People have to follow emergency plans and pay attention to the news.

Vocabulary p.31

B.

1. prevent	2. weathering	3. deposition	4. landslide
5. eruption	6. emergency	7. unnoticed	8. unexpected

C.

1. as	2. away	3. to
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<p>Make Connections</p> <p>Talk about the different ways people prepare for natural disasters.</p> <p>ESSENTIAL QUESTION</p>	<p>One way to <u>prevent</u> erosion is to plant <u>bushes and trees</u>. The roots grow into the ground and hold dirt in place. The soil is less likely to erode.</p> <p>The effects of slow natural changes can be prevented. It is difficult to stop the effects of the fast ones. <u>Scientists try to predict when these changes might happen. This way, people can prepare an emergency plan.</u> This can help save lives.</p>
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Comprehension Check p.34

A.

1. c	2. b	3. a	4. b	5. b
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B.

1. False	2. Not Given	3. True
----------	--------------	---------

C.

1.	Volcanic eruptions and landslides are two fast and powerful natural changes that affect the Earth's surface.
2.	They try to predict when fast natural changes might happen.

Comprehension Strategy p.35

Step 1

Erosion happens when strong natural forces, such as large rivers, carry dirt and rocks away. This forms canyons in the land. It also makes the land area smaller. This reduces the amount of food people can produce.



One way to prevent erosion is to plant bushes and trees. The roots grow into the ground and hold dirt in place. The soil is less likely to erode.

Step 2

1	carry dirt and rocks away
2	reduces the amount of food people can produce
3	planting bushes and trees

Comprehension Skill p.36

Erosion	Both	Landslide
<ul style="list-style-type: none"> • Strong natural forces, such as large rivers carry away dirt. • It makes the land area smaller and reduces the amount of food that people can produce. 	<ul style="list-style-type: none"> • Rocks and dirt are carried away. 	<ul style="list-style-type: none"> • Heavy rains wash away dirt on a mountain. • It destroys roads and buildings.

Summary p.37

the Earth's surface, slow natural changes, over many years, can be prevented, fast natural changes, can prepare

Vocabulary Review p.37

A.

1. emergency	2. unnoticed	3. deposition	4. landslides
--------------	--------------	---------------	---------------

B.

1. unexpected	2. prevent	3. eruption
---------------	------------	-------------

Answer Key

Unit 5 The Big Race

Build Background p.38

1.	Q	Where can you see a ride like this?
	A	I can see it in an amusement park.
2.	Q	What is the name of this ride? How does it move?
	A	It is called a roller coaster. It moves up and down and in circles.
3.	Q	What other rides do you know? How do they move?
	A	A merry-go-round goes round and round in a circle.

Vocabulary p.39

B.

1. force	2. distance	3. curve	4. compete
5. zip	6. apply	7. accelerate	8. friction

C.

1. around	2. with	3. down
-----------	---------	---------

Make Connections

Talk about what Liam and Alex learned from science to build a fast car.

ESSENTIAL QUESTION

“That information helps,” said Liam. “Giving our car a big push will make it go faster.”

“That’s right!” said Clara. “Now, tell me about the racing track.”

“There are several **curves**, so we need to know how to turn quickly,” said Alex.

“You should slow down before you turn,” said Clara. “Otherwise, you could lose control. Friction is a force between two surfaces that slows things down.” Clara bent her knee so that the skate’s stopper rubbed against the ground. She rolled toward the boys and stopped. “Friction between the stopper and the floor makes me stop.”

Comprehension Check p.42

A.

1. b	2. b	3. c	4. a	5. c
-------------	-------------	-------------	-------------	-------------

B.

1. False	2. Not Given	3. True
-----------------	---------------------	----------------


C.

1.	They can give their car a big push to make it go faster.
2.	They should slow down before they turn so that they don't lose control.

Comprehension Strategy p.43

Step 1

Liam and Alex stared as Clara **zipped** past them. "Speed is the **distance**, or how far, an object moves in a certain amount of time," said Clara. She pushed off from a wall. "A force is a push or a pull. When I **apply** a big enough force on an object, it moves. The harder the push, the bigger the force and the faster I go. For example, when I push against the wall, I **accelerate**, or increase my speed."



A force is a push or a pull.

"That information helps," said Liam. "Giving our car a big push will make it go faster."

Step 2

1	a push or a pull
2	pushed against the wall
3	go faster

Comprehension Skill p.44

Cause
Clara applies a big enough force on an object.

→

Effect
The object moves.

Cause
Clara bent her knee so that the skate's stopper rubbed against the ground.

→

Effect
She rolled toward the boys and stopped.

Summary p.45

build a fast car, science museum, used skating, make it accelerate, slow down, information helpful

Vocabulary Review p.45

A.

1. curve	2. friction	3. zipped	4. competed
----------	-------------	-----------	-------------

B.

1. sped up	2. space	3. power
------------	----------	----------

Answer Key

Unit 6 The Business of Helping Others

Build Background p.46

1.	Q	What is the man selling?
	A	He is selling fruits and vegetables.
2.	Q	Have you and your family ever bought something from a farmer?
	A	Yes, we often visit a farm and buy some fruits and vegetables.
3.	Q	What is the difference between buying food directly from a farmer and buying food in a supermarket?
	A	Food bought directly from a farmer is cheaper and fresher than food from a supermarket.

Vocabulary p.47

B.

1. purchase	2. participate	3. poverty	4. run (a business)
5. fund	6. handicrafts	7. charity	8. beneficial

C.

1. in	2. to	3. away
-------	-------	---------

Make Connections

Talk about how businesses today help people.

ESSENTIAL QUESTION

Businesses that **participate** in fair trade think that this is **beneficial** in many ways. When a poor community sells its goods at a fair price, it will have money for its basic needs. It will have extra money to spend on schools and health, too. Farmers who get a fair price for their crop can also take good care of their land.

TOMS is a business that makes shoes. It wants to help people who have very little. In 2006, TOMS made a promise. For each pair of shoes it sold, it would give a pair to children in need. People liked the message and felt good when they **purchased** the shoes. TOMS continues to do what it promised. So far, TOMS has given away millions of pairs of shoes! It now wants to improve eye health and is doing the same with glasses.

Hard Rock Cafe is a business that **runs** restaurants around the world. The Hard Rock Heals Foundation raises **funds** by selling songs, concert tickets, and T-shirts. Famous musicians donate art to print on the T-shirts. These sales make millions of dollars for **charity**. Hard Rock Cafe believes that music has the power to help people.

Comprehension Check

p.50

A.

1. c	2. a	3. b	4. b	5. a
------	------	------	------	------

B.

1. True	2. Not Given	3. False
---------	--------------	----------

C.

1.	TOMS is also giving glasses away.
2.	A good business not only makes money but also helps people in need.

Comprehension Strategy p.51

Step 1

Farmers and workers in some countries often live in **poverty**. The idea of fair trade was born to help them. Businesses that join this movement treat farmers and workers in a fair way. For example, a fair trade coffee business agrees to buy its beans from a farmer at a fair price. A fair trade business that sells **handicrafts** agrees to pay all workers equally.



Businesses that **participate** in fair trade think that this is **beneficial** in many ways. When a poor community sells its goods at a fair price, it will have money for its basic needs. It will have extra money to spend on schools and health, too. Farmers who get a fair price for their crop can also take good care of their land.

Step 2

1	treat farmers and workers in a fair way (buy things from farmers at a fair price and pay all workers equally)
2	a coffee business and a business that sells handicrafts
3	have money for basic needs and extra money to spend on schools and health

Comprehension Skill p.52

<p>Main Idea Hard Rock Cafe is a business that runs restaurants and also helps people through charity.</p>	<p>Key Detail: The Hard Rock Heals Foundation raises funds by selling songs, concert tickets, and T-shirts.</p>
	<p>Key Detail: Famous musicians donate art to print on the T-shirts.</p>
	<p>Key Detail: These sales make millions of dollars for charity.</p>

Summary p.53

help the community, participate in, sells shoes, runs restaurants, raises funds, good business

Vocabulary Review p.53

A.

1. participate	2. charity	3. poverty	4. funds
----------------	------------	------------	----------

B.

1. ran	2. purchased	3. beneficial
--------	--------------	---------------

McGraw Hill

Answer Key

Unit 7 Aesop: A Storyteller for All Time

Build Background p.54

1.	Q	What are the girls in the picture doing?
	A	They are listening to a girl telling a story.
2.	Q	Have you ever told a story to your friends? What was it about?
	A	I told funny stories to my classmates. One was about a cat and a mouse.
3.	Q	What lessons can you learn from a story?
	A	Some stories help me learn to be honest and care for others.

Vocabulary p.55

B.

1. spread	2. encourage	3. appreciate	4. exist
5. moral	6. entertain	7. wisdom	8. honest

C.

1. of	2. from	3. in
-------	---------	-------

Make Connections

What morals do the two fables teach us?

ESSENTIAL QUESTION

You may know some of Aesop's fables, such as *The Tortoise and the Hare*. This story is about a hare that was too confident. In the end, he lost a race to a slow tortoise. The moral of the story is, "Slow and steady wins the race."

Another fable, *The Dog and His Reflection*, is about a dog with a bone. The dog sees his reflection in the water. He thinks it is another dog with a bigger bone. He wants this bone, too, and he barks. But as he barks, the bone falls from his mouth. He ends up with nothing. The moral of this story is to appreciate what you have and not be too greedy.

Comprehension Check p.58

A.

1. a	2. c	3. c	4. b	5. a
------	------	------	------	------

B.

1. False	2. True	3. Not Given
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C.

1.	People entertained themselves by telling stories and other friends would retell these stories.
2.	Some experts think that he might not have created all of them and may have taken some stories from others and improved them.

Comprehension Strategy p.59

Step 1

Aesop was a famous storyteller in ancient Greece. We know his stories have survived for almost three thousand years. However, we don't know much about Aesop himself. Some believe he was a slave. However, because of his talent for storytelling, his master freed him. Others think the rulers of the time admired Aesop's wisdom and made him an adviser.

Whoever Aesop was, he is known because of his stories called "fables." Fables are short stories that end with a moral. The characters are often animals that speak and solve problems like humans.



Step 2

a slave, freed him, an adviser, his stories called "fables"

Comprehension Skill p.60

Cause
A hare was too confident.

→

Effect
He lost a race to a slow tortoise.

Cause
A dog wants another bone and barks.

→

Effect
As he barks, the bone falls from his mouth and he ends up with nothing.

Summary p.13

for his fables, animal stories, kind and honest, all his creation, improved them, many languages

Vocabulary Review p.61

A.

1. spread	2. encourage	3. honest	4. exists
-----------	--------------	-----------	-----------

B.

1. thank	2. lesson	3. knowledge
----------	-----------	--------------

Answer Key

Unit 8 The Fisherman and the Kaha Bird

Build Background p.62

1.	Q	What is the frog doing?
	A	It is playing basketball.
2.	Q	If you wrote a story about this frog, what words would you use to describe it?
	A	I would describe the frog as energetic and good at sports.
3.	Q	What would the message of the story be?
	A	It would be, "If you make every effort, you can do anything."

Vocabulary p.63

B.

1. servant	2. appear	3. prepare	4. reward
5. betray	6. startled	7. reliable	8. touched

C.

1. out	2. onto	3. in
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<p>Make Connections</p> <p>Why did the Kaha trust the fisherman? How did he lose her trust in the end?</p> <p>ESSENTIAL QUESTION</p>	<p>Four hundred of the king's servants went home with the fisherman. They hid among the trees as the fisherman prepared a big meal to attract the Kaha. When she arrived, the fisherman said, <u>"I made this feast to thank you."</u></p> <p><u>The Kaha was touched and flew down. Suddenly, the fisherman grabbed her. She was startled and began to fly away</u> with the fisherman still holding on. A servant jumped out and held the fisherman's feet, but the bird rose higher. A second and third servant grabbed onto the first. Soon all four hundred servants were hanging in the air!</p>
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Comprehension Check p.66

A.

1. b	2. c	3. a	4. b	5. a
-------------	-------------	-------------	-------------	-------------

B.

1. True	2. False	3. Not Given
----------------	-----------------	---------------------

C.

1.	The Kaha thought the fisherman worked hard, but received little in return. She wanted to help him.
2.	The king offered fifty bags of gold for catching the Kaha and the fisherman's greed was too strong.

Comprehension Strategy p.67

Step 1

Long ago, there lived an old fisherman. He worked very hard but only caught a few fish a day.

One morning, the fisherman was fishing in the river. Suddenly, a great bird with silver feathers **appeared**. This was the Kaha, a magical bird that helped poor or sick people.

"You work hard and receive little in return," said the Kaha. "I'll help you. I'll bring you fish every day." The fisherman couldn't believe his luck.

The Kaha was **reliable** and came every day. The fisherman now had more than enough fish to eat and sell.



Step 2

Answer 1	He worked very hard but only caught a few fish.
Answer 2	The Kaha was a magical bird that helped poor and sick people.
Answer 3	He couldn't believe his luck.

Your Question	How did the Kaha help the fisherman?
Your answer	The Kaha brought him fish every day.

Comprehension Skill p.68

Theme: Do not be too greedy.

Clue: The fisherman realized he should not have betrayed the Kaha.

Clue: He hoped to see the bird, but the Kaha never appeared again.

Summary p.69

brought him fish, as a reward, got greedy, was touched, grabbed her, let go of

Vocabulary Review p.69

A.

1. appear

2. prepare

3. reliable

4. startled

B.

1. betrayed

2. servant

3. touched

Answer Key

Unit 9 The Moonlight Concert Mystery

Build Background p.70

1.	Q	What is the toad wearing?
	A	It is wearing a crown.
2.	Q	What story does the toad remind you of? Does it have a happy ending?
	A	It reminds me of the story, "The Princess and the Frog." It has a happy ending.
3.	Q	Who are the characters in your favorite animal stories? What do you like about them?
	A	I like the ugly duckling. He gets bullied at first. But then he finally finds his place and becomes a beautiful swan.

Vocabulary p.71

B.

1. mumble	2. detective	3. steal	4. conclusion
5. offer	6. cancel	7. evidence	8. miserable

C.

1. to	2. to	3. over
-------	-------	---------

Make Connections

In what ways is Tosh a good detective?

ESSENTIAL QUESTION

"It sounds like Oliver stole the instruments!" said Charlie.

"A good detective never jumps to conclusions." said Tosh. "He must look at all the evidence before deciding."

Comprehension Check p.74

A.

1. b	2. c	3. a	4. b	5. c
------	------	------	------	------

B.

1. False	2. Not Given	3. True
----------	--------------	---------

C.

1.	They rushed into his office to tell him that the concert was canceled.
2.	He heard a drum beat and his friends shouted "Surprise!"

Comprehension Strategy p.75

Step 1

Tosh the Turtle, a famous **detective**, sat behind his desk after a long day.

"I'm so glad this workday is over," said Tosh to himself. "Now I can enjoy my birthday. It's almost time for the Moonlight Concert!"

Just then, Charlie the Crab and Angela the Angelfish rushed into Tosh's office.

"Tosh, can you believe that the Moonlight Concert was **canceled**?" asked Charlie.

"Slow down," said Tosh. "What do you mean the concert was canceled? Everyone has been looking forward to it all week!" He grabbed his notebook and rushed to the concert stage.



Step 2

Answer 1	He planned to enjoy his birthday by going to the Moonlight Concert.
Answer 2	They brought the news that the concert was canceled.
Answer 3	He grabbed his notebook and rushed to the concert stage.

Your Question	Where did Tosh rush to?
Your answer	He rushed to the concert stage.

Comprehension Skill p.76

Event 1	Tosh decided to go straight to Mermaid Cave to question all his friends.
Event 2	As Tosh pulled back the seaweed curtain to the cave, he heard a drum beat.
Event 3	Suddenly, the lights came up and everyone shouted, "Surprise! Happy birthday, Tosh!"
Event 4	Tosh thanked his friends for creating the mystery for him and enjoyed the wonderful surprise.

Summary p.77

his birthday, was canceled, were stolen, more evidence, question his friends, enjoyed the mystery

Vocabulary Review p.77

A.

1. conclusion	2. offered	3. miserable	4. detective
---------------	------------	--------------	--------------

B.

1. take	2. muttered	3. facts
---------	-------------	----------

McGraw Hill

Answer Key

Unit 10 Rescuing Our Reef

Build Background p.78

1.	Q	What is the clownfish doing?
	A	It is taking a rest inside the anemone.
2.	Q	What is the relationship between the clownfish and the anemone?
	A	They live together and help each other.
3.	Q	What are some other examples of relationships between animals?
	A	Crocodiles and crocodile birds also help each other.

Vocabulary p.79

B.

1. photosynthesis	2. pollution	3. consumer	4. billions
5. producer	6. food chain	7. bleach	8. extinct

C.

1. into	2. Without	3. to
---------	------------	-------

<p>Make Connections</p> <p>Talk about how the plants and animals that live in a coral reef are connected.</p> <p>ESSENTIAL QUESTION</p>	<p>Billions of tiny animals, called coral polyps, live in the reef. Small plants, called algae, live inside the coral. <u>Algae make food for the coral by using a process called photosynthesis.</u> In return, <u>the coral gives the algae a home.</u> They need each other to survive.</p> <p><u>Many plants and animals depend on the reef for food and shelter.</u> When coral reefs die, these plants and animals could become extinct.</p>
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Comprehension Check p.82

A.

1. c	2. b	3. a	4. a	5. b
------	------	------	------	------

B.

1. True	2. Not Given	3. False
---------	--------------	----------

C.

1.	Algae make food for the coral and the coral gives the algae a home.
2.	When coral reefs die, many plants and animals that depend on the reef for food and shelter could become extinct.

Comprehension Strategy p.83

Step 1

Sue swims back to the boat. "I have some good photos!" she says. "Some show a healthy reef and some show a sick reef." She can't wait to send the photos to the Nature Conservancy, an organization that rescues our reefs. Scientists there grow coral on concrete blocks. Then they plant the blocks in reefs to rebuild them.



Sue hopes her photos will show the connection between sick white reefs, climate change, and pollution. She wants them to help coral reefs all around the world.

Step 2

both healthy and sick, an organization, rescue our reefs, coral reefs, the connection

Comprehension Skill p.84

<p>Main Idea Without algae, the coral starves and loses its color.</p>	<p>Key Detail: Climate change and pollution break the connection between the coral and the algae.</p>
	<p>Key Detail: The algae stop making food, which causes the coral to get rid of them.</p>

Summary p.85

in the coral reef, depend on, make food, bleached white, people understand, are connected

Vocabulary Review p.85

A.

1. billions	2. bleach	3. photosynthesis	4. extinct
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B.

1. producer	2. pollution	3. consumers
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McGraw Hill

Answer Key

Unit 11 Animal Adaptations

Build Background p.86

1.	Q	What is the anteater doing?
	A	It is eating ants from the ant nest.
2.	Q	How does its long nose help it survive?
	A	Its long nose helps it get inside the ant nest and eat the ants easily.
3.	Q	What other animals have special characteristics to help them survive?
	A	When lizards are in danger, they can break off their tails and regrow them.

Vocabulary p.87

B.

1. appetite	2. camouflage	3. predator	4. snout
5. prey	6. avoid	7. nocturnal	8. horrible

C.

1. to	2. at	3. in
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<p>Make Connections</p> <p>How do adaptations help animals survive?</p> <p>ESSENTIAL QUESTION</p>	<p>What would you do if you saw a skunk lift its tail? You should run away fast! <u>Skunks can get rid of a predator with a horrible-smelling spray from under their tails.</u> This protects them as the predator loses its appetite and runs away!</p> <p>The special features that animals have in order to survive are known as adaptations. <u>Some animals have bright colors to warn predators that they are poisonous. Others can hear sounds that are very far away or can feel tiny movements in the ground.</u></p> <p>The cold Arctic is the home of the caribou. <u>To stay warm, caribou have two layers of fur and a thick layer of fat.</u> They can weigh over 227 kilograms. <u>The noses and mouths of caribou are covered with short hair. This hair warms the air before it enters their lungs. It also keeps them warm as they push aside snow to find food.</u></p>
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	<p>Look closely at the picture. Can you spot the insect? Does it look like a twig? It is actually a phasmid. Phasmids are good at camouflage. <u>They can change their colors to blend in with their surroundings. This way, predators cannot see them.</u> Phasmids are also nocturnal, which means that they move around at night. <u>This makes them hard to spot, and they can avoid predators.</u></p> <p>In a wetland like the Florida Everglades, the dry season can be hard on animals. Animals like alligators have adapted to survive. <u>They use their feet and snouts to clear dirt from the holes in rocks. This makes a place to hold water for them to drink.</u></p>
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Comprehension Check p.90

A.

1. b	2. c	3. c	4. c	5. a
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B.

1. True	2. False	3. Not Given
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C.

1.	They can get rid of a predator with a horrible-smelling spray that makes the predator lose its appetite and run away.
2.	It makes them hard to spot and they can avoid predators.

Comprehension Strategy p91

Step 1

In a wetland like the Florida Everglades, the dry season can be hard on animals. Animals like alligators have adapted to survive. They use their feet and snouts to clear dirt from the holes in rocks. This makes a place to hold water for them to drink.



Other animals come and drink from these holes, too. This makes them easy prey. Alligators can catch them without warning. However, these animals also need water, so they must take their chances. In the end, it's all about survival!

Step 2	the dry season, feet and snout, hold water, catch them
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Comprehension Skill p.92

Main Idea Caribou have special ways to survive in the cold Arctic.	Key Detail: To stay warm, caribou have two layers of fur and a thick layer of fat.
	Key Detail: The noses and mouths of caribou are covered with short hair. This hair warms the air before it enters their lungs.
	Key Detail: This hair also keeps them warm as they push aside snow to find food.

Summary p.93

different features, fur and fat, noses and mouths, use camouflage, hard to spot, dirt from holes

Vocabulary Review p.93

A.

1. predators	2. appetite	3. nocturnal	4. prey
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B.

1. unpleasant	2. noses	3. prevent
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Answer Key

Unit 12 Animals Show the Way

Build Background p.94

1.	Q	What do you see in the pictures?
	A	I can see a beaver dam and a dam built by humans.
2.	Q	What do the two pictures have in common?
	A	They both show dams, which control the amount of water that flows through.
3.	Q	What other animals have given people good ideas for inventions?
	A	Birds' feathers gave people a good idea to invent waterproof fabric.

Vocabulary p.95

B.

1. wound	2. ripple	3. emerge	4. overlap
5. remove	6. scales	7. elastic	8. sensitive

C.

1. for	2. to	3. into
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Make Connections

What animals inspired people to create better designs?

ESSENTIAL QUESTION

For thousands of years, animals and humans have shared the Earth. Our four-legged, winged, and furry friends have taught us a lot. We learned to hunt better by watching lions. We watched as beavers built dams to control water flow. To make his airplane, Wilbur Wright observed how birds moved their wings. Today, the animal kingdom is still a source of great ideas for us.

Take the bullet train, for example. It had a weakness. When it **emerged** from tunnels, it made a very loud “boom” sound. One of the train engineers wanted to fix this. This man was also a birdwatcher. As he watched a kingfisher dive for fish, he noticed that its beak hardly made a **ripple** in the water.



He realized that the beak was the perfect shape for the train’s nose. He designed a new 17-meter steel beak for the train. This solved the noise problem!



Spider silk is one of nature’s great materials. It is light and **elastic**, but very strong. The ancient Greeks and Romans used it to stop bleeding and to cover soldiers’ **wounds**. Now scientists have taken this idea and adapted it.

They have made a new type of medical tape to cover wounds. It is also used to attach tubes to newborn babies. The tape can be **removed** gently, so it does not hurt soft and **sensitive** skin.



A Chinese team was looking at how butterflies stay warm on cool days. They found that their wings have **scales** that fit together and **overlap**. Small holes between the scales let light into the lower layer. This helps butterflies stay warm. Scientists now think this design could work for solar panels. Instead of the flat panels used now, we may see 3D panels in the future. They might be more complex to make, but they would be much more powerful.

Comprehension Check

p.98

A.

1. c	2. b	3. c	4. b	5. c
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B.

1. False	2. Not Given	3. True
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C.

1.	The animal kingdom is a great source of fantastic ideas for people to solve problems.
2.	Their wings have scales that fit together and overlap. Small holes between the scales let light into the lower layer. This helps butterflies stay warm.

Comprehension Strategy p.99

Step 1

Take the bullet train, for example. It had a weakness. When it emerged from tunnels, it made a very loud "boom" sound. One of the train engineers wanted to fix this. This man was also a birdwatcher. As he watched a kingfisher dive for fish, he noticed that its beak hardly made a ripple in the water. He realized that the beak was the perfect shape for the train's nose. He designed a new 17-meter steel beak for the train. This solved the noise problem!



Step 2

1.	emerged from tunnels
2.	hardly made a ripple
3	the perfect shape

Comprehension Skill p.100

Cause	→	Effect
The wings of the butterflies have scales that fit together and overlap.	→	Butterflies stay warm on cool days.
Small holes between the scales let light into the lower layer.		Scientists now think this design could work for solar panels.

Summary p.101

design a new nose, noise problem, dive for fish, new medical tape, of their wings, new discoveries

Vocabulary Review p.101

A.

1. scales	2. wound	3. overlapped	4. sensitive
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B.

1. removed	2. emerging	3. ripples
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