Log in at ExplorerMag.org to access additional resources including:

- Interactive Digital Magazine with videos and activities
- Projectable PDF for one-to-one instruction

Educational consultant Stephanie Harvey has helped shape the instructional vision for this Teacher’s Guide. Her goal is to ensure you have the tools you need to enhance student understanding and engagement with nonfiction text.

Lexile® Framework Levels

**Scout**

Some articles with characteristics of emergent text will be easier for students to read. You may find that other articles are better suited for teacher read-alouds.

- On the Move ........................................... 330L
- Dog on Wheels ......................................... 380L
- Nice to Greet You! ...................................... 370L

**Voyager**

- On the Move ........................................... 330L
- Dog on Wheels ......................................... 380L
- Nice to Greet You! ...................................... 370L

Standards Supported

- Common Core State Standards (CCSS)
- Next Generation Science Standards (NGSS)
- C3 Framework for Social Studies State Standards (C3)

See each lesson for the specific standard covered.
BACKGROUND
Since 1888, the National Geographic Society has funded scientists and explorers and shared their findings with the world. To support educators who use our resources, we have created a Learning Framework, which lays out what we believe students should learn from their experiences with the Society.

PURPOSE
The Learning Framework was designed to convey the Society’s core beliefs and values. It is built around a set of attitudes, skills, and knowledge that embody the explorer mindset.

To determine the learning outcomes within the Learning Framework, we dug deep into national standards in key subject areas. We also sought advice from subject matter and child development experts, along with the combined expertise of NG instructional designers, researchers, and content developers. To learn more, go to: https://www.nationalgeographic.org/education/learningframework/.

IMPLEMENTATION
Each article in this magazine has a knowledge-based link to the Learning Framework.

MINDSET OF AN EXPLORER: KEY FOCUS AREAS

Attitudes
CURIOSITY An explorer remains curious about how the world works throughout his or her life. An explorer is adventurous, seeking out new and challenging experiences.

RESPONSIBILITY An explorer has concern for the welfare of other people, cultural resources, and the natural world. An explorer is respectful, considers multiple perspectives, and honors others regardless of differences.

EMPOWERMENT An explorer acts on curiosity, respect, responsibility, and adventurousness and persists in the face of challenges.

Skills
OBSERVATION An explorer notices and documents the world around her or him and is able to make sense of those observations.

COMMUNICATION An explorer is a storyteller, communicating experiences and ideas effectively through language and media. An explorer has literacy skills, interpreting and creating new understanding from spoken language, writing, and a wide variety of visual and audio media.

COLLABORATION An explorer works effectively with others to achieve goals.

PROBLEM SOLVING An explorer is able to generate, evaluate, and implement solutions to problems. An explorer is a capable decision maker—able to identify alternatives and weigh trade-offs to make a well-reasoned decision.

Knowledge
THE HUMAN JOURNEY An explorer understands where we came from, how we live today, and where we may find ourselves tomorrow.

OUR CHANGING PLANET An explorer understands the amazing, intricate, and interconnected systems of the changing planet we live on.

WILDLIFE AND WILD PLACES An explorer reveals, celebrates, and helps to protect the amazing and diverse creatures we share our world with.
Infer from Images

CONNECT & ENGAGE (5 minutes)

Kids are in a group on the floor in front of you. Sit on a low chair and hold up pages 8–9.

Take a look at these pictures of a dog named Norman. Norman is a dog with some unusual talents. Let’s look closely at the picture on page 9. What do you notice? Turn and talk about what you notice.

Kids turn and talk and then share out.

Thank you for sharing what you noticed! We’re going to continue to use our observation skills as we read this article and view the pictures. If we look carefully, the pictures will help us figure out some things as we read.

MODEL (10 minutes)

Kids sit in a group on the floor, with you in a low chair in front of them.

We are going to read this article called “Dog on Wheels.” (Point to the title.) You had a lot of great observations when you looked at the picture on page 9. Now I’m going to read the text to see what we can learn.

Read the text on page 8.

Okay. We found out that Norman is a dog on the move. He is on wheels. The picture on page 9 gives us lots of good information that isn’t necessarily in the text. For example, what kind of wheels is Norman using? We can tell from the picture that he is on a scooter, and we see that the scooter has 4 wheels. He is definitely, as the title says, a dog on wheels. We can also see in the picture that Norman is using the scooter in much the same way as a person would. He is standing on his hind legs, and his front paws are on the handles. Is this something you are likely to see on a street or sidewalk near you? Probably not. Why is this so unusual? Turn and talk about that.

Kids turn and talk. They should infer that this is unusual because dogs don’t usually move around on scooters. They run and walk on their 4 legs.

Yes! Those are really good observations. Dogs don’t usually move around on scooters, do they? This is a clue to us that Norman has some special skills and that someone probably had to teach him to him. We might also know from personal experience that it is possible to train a dog to do tricks. You have to admit, though, that using a scooter is a pretty amazing trick for a dog.

Well done, class! We used the picture to infer, or figure out, more information. I’m going to write down on a Think Sheet the facts in the first column and what we figured out, or inferred, in the second column. I’ll write that the facts were that “Norman is a dog that can use a scooter.” and “He stands up on the scooter like a person.” We figured out that in order to use a scooter, Norman probably had someone who taught him how to do that. I’ll put “Someone must have trained Norman to use a scooter.” in the inference column.

Kindergarten Standard Supported
• CCSS Reading Informational Text: With prompting and support, describe the relationship between illustrations and the text in which they appear. (K-7)

First Grade Standard Supported
• CCSS Reading Informational Text: Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. (1-6)

What You Will Need
• “Dog on Wheels” (Young Explorer, pages 8–15)
• Think Sheet (Teacher’s Guide, page 5)
• Clipboards
• Pencils
GUIDE (10 minutes)

Hand out the Think Sheets attached to clipboards. Kids remain grouped in front of you on the floor.

Now look at the pictures on page 10. What do you think is happening in these pictures? Turn and talk about that.

Kids turn and talk. Then read the text to them.

The text also gives us information, but I’m sure you noticed a lot by looking at the pictures, too. Draw or write the facts you learned about Norman and Karen on your Think Sheet. Then let’s draw or write what we figured out by looking at the pictures and using some of the knowledge we already have.

For facts, kids might draw or write that Norman’s owner is a dog trainer and that she trained Norman how to ride the scooter. For inferences, kids might draw or write that it takes time to train a dog and that treats are often used to reward animals as they are learning. In the first picture, Karen might even have a treat in her right hand to use as a reward for Norman.

Now let’s look at the picture and text on page 11. I’m going to read the text as you look at the picture.

Read the text on page 11.

This text and picture give us information about how Norman gets the scooter to move. We learn that Norman has to stand on the scooter and then push off with one of his back paws. This push is a force. The labels show us where his front and back paws are. Have you ever used a scooter? Turn and talk about what you know about using a scooter and how that relates to the information in the text and the picture on page 11.

Kids turn and talk.

COLLABORATE (25 minutes)

Read aloud the text on pages 12–15. Then have kids partner up to look at the pictures to observe how Norman learned to ride a bike and how a bike works.

With a partner, look at the pictures on pages 12–15 and try to figure out how Norman learned to ride a bike. Use what you know and the clues in the pictures to help you figure this out. Do you see some similar training methods Karen is using? How is riding a bike different from riding a scooter? Is it easier or harder? Use the pictures and text on page 14 that show how a bike works. Use what you already know, what the text tells you, and what you see in the pictures.

Kids partner up to work together. Have kids share and compare with other partner groups.

When you are finished, draw or write the facts and your inferences on your Think Sheet.

Some facts kids might draw or write:
- Karen taught Norman to ride a bike.
- Norman learned to ride a bike.
- Riding a bike is harder than riding a scooter.

Some inferences kids might have:
- Norman is a very smart dog, since there aren’t many dogs that can ride bikes and scooters.
- Norman’s bike has training wheels. That’s probably because he needs them to balance.

SHARE THE LEARNING (10 minutes)

Kids join a sharing circle.

Who would like to share something they figured out, or inferred, from one of the pictures in “Dog on Wheels”? Before we start, remember how we share politely with the class. First, share your inference and how you were able to figure it out. Did you use what you already know about dogs, scooters, or bikes? If so, tell us about that. When you are finished sharing, ask if there are any questions or comments. Then politely call on someone else who would like to share.

Allow time for kids to share their learning.

Today we learned that we can figure out, or infer, information from pictures. Pictures can give us many clues, if we look closely at them and also use what we already know. You all did an awesome job inferring today!
Write or draw the facts and your inferences.

<table>
<thead>
<tr>
<th>FACTS</th>
<th>INFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LESSON FRAME Infer from Images

What You Will Need
• Nonfiction text  • Think Sheet template  • Clipboards  • Pencils

This frame is a template of the language arts lesson. It has the instructional moves and language of the lesson, but the specific content has been removed. This way you can use the Lesson Frame for the other articles in the issue or for any nonfiction text you might be teaching.

CONNECT & ENGAGE (5 minutes)

Kids are in a group on the floor in front of you. Sit on a low chair and hold up the article.

Take a look at the picture(s) on page(s) _________. Let’s look closely at the picture on page _____. What do you notice? Turn and talk about what you notice.

Kids turn and talk and then share out.

Thank you for sharing what you noticed! We’re going to continue to use our observation skills as we read this article and view the pictures. If we look carefully, the pictures will help us figure out some things as we read.

MODEL (10 minutes)

Kids sit in a group on the floor, with you in a low chair in front of them.

We are going to read this article called “________________________.” [Point to the title.] You had a lot of great observations when you looked at the picture(s) on page _______. Now I’m going to read the text to see what we can learn.

Read the text on page _______.

Okay. We found out that_________________________. The picture(s) on page _____ give(s) us lots of good information that isn’t necessarily in the text. For example, ____________________________. We can tell from the picture that____________________________. We can also see in the picture that____________________________. Turn and talk about that.

Kids turn and talk.

Yes! Those are really good observations. Well done, class! We used the picture to infer, or figure out, more information. I’m going to write down on a Think Sheet the facts in the first column and what we figured out, or inferred, in the second column.
GUIDE (10 minutes)

Hand out the Think Sheets attached to clipboards. Kids remain grouped in front of you on the floor.

Now look at the picture(s) on page(s) ______. What do you think is happening in the picture(s)? Turn and talk about that.

Kids turn and talk. Then read the text to them.

The text also gives us information, but I’m sure you noticed a lot by looking at the picture(s). Draw or write the facts you learned about __________ on your Think Sheet. Then let’s draw or write what we figured out by looking at the picture(s) and using some of the knowledge we already have.

Kids draw or write the facts and their inferences.

COLLABORATE (25 Minutes)

Read the text on page(s) _____ to students. Then have them partner up to look at the pictures and talk about the facts and make inferences.

Now, with a partner, look at the picture(s) on page(s) __________ and try to figure out __________. Use what you already know and the clues in the picture(s) to help you figure this out.

Kids partner up to work together. Have kids share and compare with other partner groups when they are finished.

When you are finished, draw or write the facts and your inferences on your Think Sheet.

Partners work together. Move around the room, conferring with partners.

SHARE THE LEARNING (10 minutes)

Kids join a sharing circle.

Who would like to share something they figured out, or inferred, from one of the pictures in “___________”? Before we start, remember how we share politely with the class. First, share your inference and how you were able to figure it out. Did you use what you already know? If so, tell us about that. When you are finished sharing, always ask if there are any questions or comments. Then politely call on someone else who would like to share with the class.

Allow time for kids to share their learning.

Today we learned that we can figure out, or infer, information from pictures. Pictures can give us many clues, if we look closely at them and also use what we already know. You all did an awesome job inferring today!
On the Move

SCIENCE

Kindergarten Standard Supported
• NGSS Crosscutting Concepts: Patterns: Patterns in the natural world can be observed and used as evidence. (K-LS1-1)

First Grade Standard Supported
• NGSS LS1.A: Structure and Function: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)

What You Will Need
• Projectable PDF or interactive digital magazine
• A Coconut Grows poster [Teacher’s edition]
• Science Master (page 9)

ENGAGE
Gather a variety of seeds or photos of different types of seeds. As a class, explore the collection. Encourage students to compare and contrast the seeds. Brainstorm ideas about how the characteristics of different types of seeds could help them move from one place to another.

EXPLORE
Display the “On the Move” article with the projectable PDF or the interactive digital magazine. Read aloud the headline and text on the opening pages. Have students examine the photo. Ask: How is the seed in this photo moving? (It is floating.) As a class brainstorm ideas about why seeds would need to move from one place to another. Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN
After reading, have students turn and talk with a partner to discuss what they learned about how seeds move:
• Seeds move to new places.
• Seeds can fall, blow in the wind, float on water, or be carried by animals to new places.
• Seeds move so they have room to grow into new plants.

Explain that different types of seeds travel in different ways. For example, milkweed seeds are soft and fluffy. It is easy for the wind to blow them away. Encourage students to identify traits of other seeds that allow them to move in different ways.

ELABORATE
Display and review the A Coconut Grows poster. Challenge students to explain how the tree with the flowering blooms in the top circle would be related to the tree on the beach (parent and offspring). Ask: Why might a seed sprout far away from the tree that it came from? (It might have floated across the ocean.) Then point out all of the open space around the tree. As a class, discuss how floating or moving to a new location in some other way can give seeds the space they need to grow into a tree.

EVALUATE
Have students complete the Science Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.

Science Background

Plants make seeds that can grow into new plants. Seeds need sunlight, water, and nutrients to survive. They also need space, and that is why plants spread, or disperse, their seeds to new locations.

Parent plants may produce thousands or tens of thousands of seeds in a year. If the parent plant just dropped its seeds where it grew, few seeds would succeed at growing into new plants. There would be too much competition for resources—from the parent plant as well as other seedlings attempting to take root and grow.

If a number of seedlings did sprout, the parent plant would suffer, too. As they grow, the seedlings would use up many of the resources the parent plant needs to stay alive. Spreading seeds to new locations gives both generations—and the species, itself—the best chance to survive.
SCIENCE: On the Move

Cut out the answers.

Work with a partner to put the pieces in the correct boxes.

Talk about what you learned.

<table>
<thead>
<tr>
<th>Look at these seeds:</th>
<th>What kind of seeds are they?</th>
<th>What makes them move?</th>
<th>What plant do they grow into?</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Burdock seeds" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image2.png" alt="Maple tree seeds" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image3.png" alt="Milkweed seeds" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image4.png" alt="Coconut seeds" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image5.png" alt="Burdock plant" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image6.png" alt="Maple tree" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image7.png" alt="Coconut tree" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image8.png" alt="Milkweed plant" /></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wind blows them.  
Burdock seeds  
Maple tree  
Coconut seeds  

They stick to animals.  
Burdock plant  
Maple tree seeds  
Coconut tree  

They have wings.  
Milkweed seeds  
They float.  
Waves move them.  
Milkweed plant  

They fall and spin.
Seed Dispersal

Science Background

Plants can’t move by themselves. So when it comes to dispersing their seeds, they often need help.

Lighter, smaller seeds are often carried in the wind. The seeds of dandelions and milkweeds, for example, are attached to soft, fluffy tufts. These seeds float like parachutes in the air. Other plants like maple and ash trees, have adapted the shapes of their seed so the seeds fly like helicopters in the sky. Their seeds travel as far from the parent plant as possible.

Animals are another common transporter. Animals may carry seeds from place to place or eat them, distributing seeds in new places with their waste. Plants that grow by or in the water often produce waterproof seeds that can float. Coconuts travel in this way. Acorns can float in rivers and streams, too.

ENGAGE

Point out to students that people travel in different ways. Invite students to give examples. Then point out that plants can’t move from place to place, but their seeds can. As a class, brainstorm a list of ways seeds might travel.

EXPLORE

Discuss what a seed is. Then take the class to an outdoor garden or on a walk around the school. As you explore, encourage students to observe different types of seeds around them. Encourage each student to collect one seed. Watch carefully to ensure that they only gather seeds from plants that are safe to touch.

EXPLAIN

Rejoin as a class. Invite students to share and compare the seeds they found. Remind the class that, just like humans, seeds travel in different ways. Say: Seeds from maple and ash trees travel like helicopters, twirling in circles as they fall to the ground. Toss a seed like this in the air to show what you mean. Help students identify any “helicopter seeds” they found and nearby trees that might have produced those seeds. As a class, identify other types of seeds and discuss how they might be moved by wind, water, or animals. Discuss how a particular seed’s structure, such as the barbs on a cocklebur or the protective coating on an acorn, could help it move, too. After all seeds have been examined and sources found, discuss how traveling helps seeds find the food and water they need to survive.

ELABORATE

Have students tape the seed they found to a page in their science journals. Instruct them to draw a picture of the plant it came from and write about what they learned.

EVALUATE

In small groups, have students write a story from the perspective of a seed traveling from the source to a new location. Invite groups to share their stories with the class.
Science Background

A push is a force. So is a pull. When you use a force, you can make something move. Two fun things people can make move are scooters and bikes. Norman, a Briard (French sheepdog) who lives in Georgia, U.S.A., uses forces to ride a scooter and a bike, too!

Just like humans, Norman uses his feet to push off the ground or push the pedals of his bike. When he pushes, he creates a force that makes his vehicles move.

On the scooter, Norman’s pushes make the wheels roll and the scooter move. On the bike, his pushes make the pedals move, and this causes the chain to turn. The chain turns the back wheel, and the bike moves as the wheels roll.

In 2013, Norman officially became the fastest dog on a scooter. He set a Guinness World Record by traveling 98.5 feet (30 meters) in 20.77 seconds.

Kindergarten Standard Supported
• NGSS PS2.A: Forces and Motion: Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. (K-PS2-1), (K-PS2-2)

First Grade Standard Supported
• NGSS ETS1.A: Defining and Delimiting Engineering Problems: Asking questions, making observations, and gathering information are helpful in thinking about problems. (K-2-ETS1-1)

What You Will Need
• Projectable PDF or interactive digital magazine
• Science Master (page 12)

ENGAGE
Invite volunteers to describe a time they tried to teach a dog or other type of pet a new trick. What trick did they try to teach? Did they succeed? If so, what did they do? If not, what do they think they could have done differently?

EXPLORE
Display the “Dog on Wheels” article with the projectable PDF or the interactive digital magazine. Read aloud the headline and text on the opening pages. Point out the box that says “Explore Force.” Encourage students to brainstorm ideas about what a force is and how it could be related to teaching a dog to ride a scooter. Then read the article aloud or have students read it in groups, with a partner, or on their own to find out.

EXPLAIN
After reading, explain to students that a push is a force. So is a pull. Pushing or pulling on an object, like a scooter or a bike, can make the object start or stop. It can also change the speed or direction the object is going. Ask:

How does Norman create a force to make his scooter move? (He pushes with his back paw.) How does he create a force to make his bike move? (He pushes the pedals.)

As a class, examine the diagram “How a Bike Works.” Discuss how the bike’s parts help Norman make the bike move. Ask: What would happen if Norman pushed backward instead of forward? (The scooter/bike would move backward.) What would happen if he stopped pushing? (The scooter/bike would stop moving.) Why? (There is no longer a force to make it move.)

ELABORATE
Point out to students that teaching a dog new skills or tricks isn’t easy. It takes time, patience, and a dog that is willing and able to try new things. As a class, create a list of questions students have about how a person could teach a dog to ride a scooter or bike. What would be the best way to teach the dog to start or stop the object’s motion? Encourage students to examine the photos and think about their own experiences with dogs for ideas. Invite students to share their solutions with a partner.

EVALUATE
Have students complete the Science Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.
Read each sentence. Write a "T" on the line for each sentence that is true. Cross out the incorrect word in each sentence that is false. Write a word on the line that makes each false sentence true.

1. Norman sits when he rides a scooter. ______
2. Norman pushes the ground with his front paw. ______
3. A push moves the scooter. ______
4. A push is a force. ______
5. Norman also rides a bike. ______
6. He learned to pull the pedals. ______

Now tell how Norman rides a bike. Write the numbers 1-4 on the lines. Put the steps in the correct order.

____ The wheels roll.
____ The pedals turn the chain.
____ The chain turns the wheel.
____ Norman pushes the pedals with his paws.

Draw a picture of Norman. Is he on a scooter or a bike?

Norman rides a ___________________
Nice to Greet You!

SOCIAL STUDIES

Kindergarten and First Grade Standard Supported

- C3: Geography: Human-Environment Interaction: Place, Regions, and Culture: Identify some cultural and environmental characteristics of specific places. (D2.Geo.6.K-2)

What You Will Need

- Projectable PDF or interactive digital magazine
- Animals in South America poster [Teacher’s edition]
- Social Studies Master (page 14)

ENGAGE

Smile and wave to the class (or greet them in a way more appropriate to your culture). Wait for students to respond. Then ask the class what just happened. What did you “say”? What did they “say” in return? How do they know? Guide students to understand that gestures like this are one way people communicate in your culture.

EXPLORE

Display the “Nice to Greet You!” article with the projectable PDF or the interactive digital magazine. Read aloud the headline and text on the opening pages. As a class, brainstorm a list of ways people greet each other to say “hello.” Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, review how people in the article greeted each other. Then have students identify each country mentioned and locate it on a map. Say: People who live in different places have different customs, or ways of doing things. That is part of their culture. One country can have many different cultures, and one culture can spread across many countries, too. That’s why it’s important for people to get to know one another. They may do things, such as saying “hello,” in different ways. Brainstorm a list of things people from different cultures might do in different ways. Discuss how learning about differences can help people understand each other and get along.

ELABORATE

Display the Animals in South America poster. Point out that Argentina, one of the countries mentioned in the article, is in South America. Have students find Argentina on a map. Then have them explore the poster to identify animals that live there and in other parts of South America. Say: It’s fun to learn about animals that live in different places, but it’s also important to remember that these are wild animals. It’s only safe to “greet” one of the animals you see here. Ask: Which one is it? (monarch butterfly) As a class discuss reasons why students should keep their distance from other wild animals they see.

EVALUATE

Have students complete the Social Studies Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.

Social Studies Background

People around the world express themselves in different ways. Something as common as greeting someone “hello” can vary, depending on where in the world you happen to be.

For example, in the U.S.A., people often shake hands and smile when they meet. Close friends might share a hug. In Japan, people bow when they greet someone. And in France, they shake hands and kiss each other on both cheeks—both when they arrive and when they leave.

Learning about other people’s customs and cultures is important. Understanding how people will act in specific situations helps you avoid misunderstandings. It also keeps you from unintentionally insulting a new acquaintance.
SOCIAL STUDIES: Nice to Greet You!

Draw a picture that shows how you like to greet people.

Write the names of people you have greeted this way today.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Write a word you say when you greet someone.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
ANSWER KEY

Language Arts
Think Sheet, page 5
Students should draw or write facts they learned in the Facts column. They should draw or write what they figured out by looking at pictures and by using background knowledge in the Inferences column.

On the Move
Science: page 9
Students should place the pieces in the following order:
Line 1: maple tree seeds; They have wings. They fall and spin; illustration of a maple tree
Line 2: coconut seeds; They float. Waves move them; illustration of a coconut tree
Line 3: burdock seeds; They stick to animals; illustration of a burdock plant.
Line 4: milkweed seeds; Wind blows them; illustration of a milkweed plant

Dog on Wheels
Science: page 12
Part 1: Students should respond as follows:
1. Cross out “sits”; write the word “stands” on the line.
2. Cross out “front”; write the word “back” on the line.
3. Write “T” on the line.
4. Write “T” on the line.
5. Write “T” on the line.
6. Cross out “pull”; write the word “push” on the line.
Part 2: The correct order is: 4, 2, 3, 1
Part 3: Students should draw a picture of Norman riding a scooter or a bike and write the word “scooter” or “bike” on the line.

Nice to Greet You!
Social Studies: page 14
Students should draw a picture showing how they greet people (waving, bowing, etc.). Then they should write the names of up to four people they have greeted in that way today. Finally, they should write a word they use to greet someone, such as “hello,” “hi,” “hola,” etc.

Words to Explore
Back Cover
1. greeting
2. push
3. seed
4. force