Scooters and Skates Science

Strand: Energy

Purpose for Reading: To develop understandings of push and turn forces.

Comprehension Strategies: Making connections to text, identifying cause and effect, applying knowledge.

Vocabulary

Dictionary Words: brake, push, scooter, skates, turn Vocabulary Words: boy, girl

High-Frequency Words: do, down, have, help, her, if, make, not, of, one, over, people, their, them, there, they, too, want, when, where, will, with

Before Reading

- Ask students if they have a scooter, bike, or skates at home. How do you make them go? Have students discuss and demonstrate what they do with their legs to cause motion. Tell them that when they push their foot against the ground or a pedal that they are using force to make the scooter/bike/skate move. Tell them that this is called a push force.
- Read the title and invite students to talk about what is happening on the cover.
- Read the title page together and ask which direction the girl is moving. How do you know she is going forwards?
- Tell students that this book will tell us about the forces that make scooters and skates move and turn.

Introduce the Picture Dictionary

• Ask students to turn to the picture dictionary. Read and discuss the photos and labels. Ask students to describe what is happening in each

Theme: Force and Motion

photo. Use questions such as, How do you think the girl makes the scooter go forwards? What does it mean to brake?

Take a Photo Walk

- Pages 4–5: Invite students to look at the photo and talk about what is happening. Read the caption and discuss how the girl is making the scooter go forwards by pushing.
- Pages 6–7: Ask students to look at these photos and read the captions. Invite students to discuss how the children are moving. What is the girl pushing on to make the scooter move? What is the boy pushing against?
- Pages 8–9: Have students talk about the photos and read the captions. *If you use a lot of force, do you move quickly or slowly?* Prompt students to look closely at the photos.
- Pages 10–11: Invite students to discuss what is happening now. Read the captions and ask students to look at the photos and talk about how the girl on the scooter is braking and how the boy on skates is braking.
- Pages 12–13: Have students look at the photos and read the captions. What is this part of the book about? Which way will the scooter turn?
- Pages 14–15: Have students read the heading. Have them describe the information contained on these pages. Prompt students to understand that this is a set of instructions. What tells you the direction to read in?

Read the Book

- Ask students to turn to the cover and read the title independently.
- Turn to pages 2-3. Read the dictionary words and the sentences on page 3.
- Turn to pages 4-5. Ask students to read these pages independently. Remember to use your eyes, and point only if you need help to check.
- Ask students to continue reading the book independently. Provide support as needed.

After Reading

Comprehension

- Invite students to return to the book and talk about the body action required to move forwards and turn on scooters and skates. Have them link the action with the force created and the effect of the force. Prompt with questions such as, What is the girl on page 5 doing to make the scooter move forwards? What force did she use? What did the force cause the scooter to do? What would happen if she used the push action over and over quickly?
- Ask students to describe the force used to turn on a scooter.
- Support students to generalize about the use of a push force. When you ride a bike, what sort of force do you apply to the pedals to move the bike forwards? What sort of force do you use when you walk up a flight of stairs?

Vocabulary and Word Recognition

• Have students find the word *their* on page 4. Write the word on the board. Ask students how to spell the word *there*. Write it on the board. Have students think of sentences containing each of these words. Write them on the board. Remind students

that *their* identifies ownership; for example, *their* scooters or their skates. Ask students to come out to write the appropriate word for each sentence. Ask students to write the word their, and check it for accuracy. Have them write it five times, saying it as they write it.

Oral Language

• Have students work in pairs. Have them tell each other different ways to use a push force. Have them try out the ways.

Writing

• Have students write about how to use a push force to skate or scoot.

Creative Extension Activities

- Have students complete a circuit of tasks requiring them to use push force; for example, scooter boards, step-ups, jumping, pushing against a partner, etc.
- Have students draw pictures of people using push forces. Have students label the things they are doing.

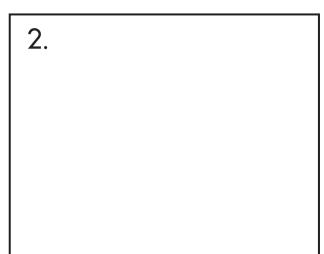
Independent Follow-Up Activities

- · Reread the book to a partner to build fluency.
- Complete the activities on page 16.
- Complete the photocopiable activities.

Name:							
Think of something you can do that uses a push force. Draw it in the box. Write about your picture underneath.							

How do you turn on a bike? Write the instructions. Use pages 14 and 15 to help you. Be sure to use the words *push* and *turn* to describe the actions.

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