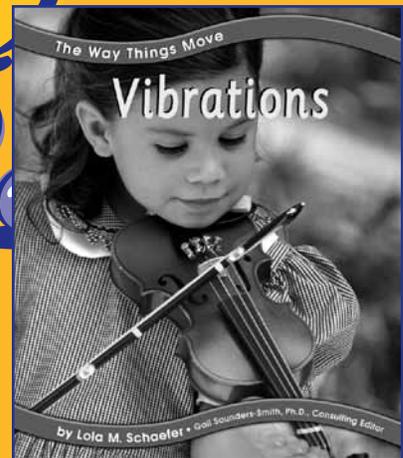
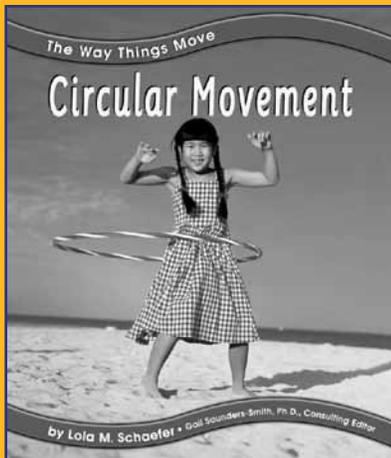
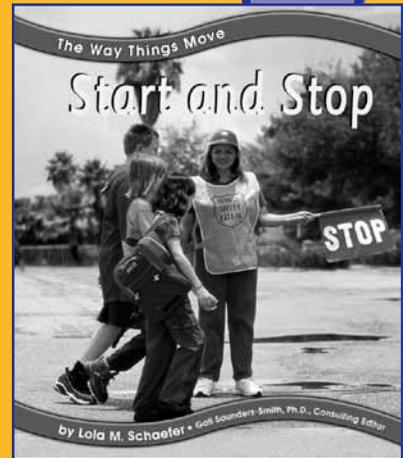
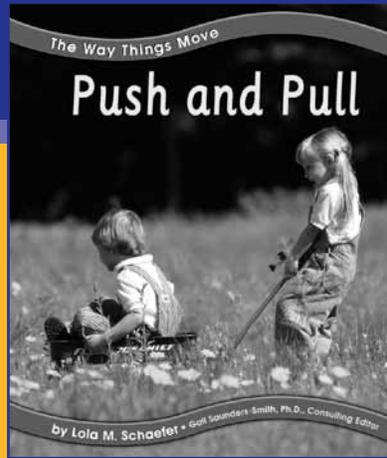
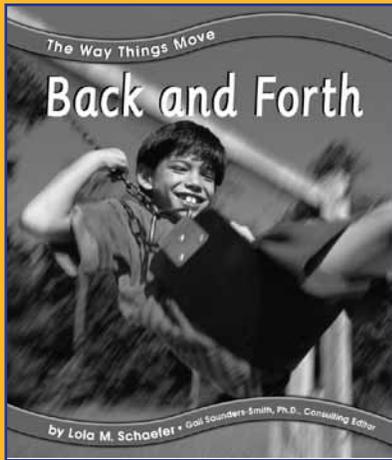


Teaching Guide for the Pebble Books

The Way Things Move Set



ISBN 0-7368-8770-9



Back and Forth

Early-Intervention Level for Reading Recovery®-type Programs*: 7
Guided Reading Level:** E

Supports

- One to three lines of text per page
- Repetitive phrase: *back and forth*

Challenges

- Concept vocabulary: *backward, forward, movement, pendulum, rolling pin*
- Verbs repeat, then change

Text Features

- High-frequency words: *a, and, is*
- /k/, spelled *ck*: *back, rocks*

The Way Things Move set supports these standards:

Benchmarks for Science Literacy: Project 2061 (AAAS, 1995)

- Standard 4F, K-2

Curriculum Standards for Social Studies (NCSS, 1994)

- Standard VIII a

National Science Education Standards (NAS, 1996)

- Content Standard B, K-4

Lesson for Guided Reading

Back and Forth

Help students read the set title in the red banner. Discuss with them what the books in this set are about. Then ask them what kind of movement they experience when they are on a swing, like the boy in the photograph. Upon hearing the correct terms, help students read the title—*Back and Forth*.

First Reading

- On the title page, challenge students to read the title. Ask, “What is moving back and forth in the photograph?”
- At the table of contents, ask, “Where will we learn about things that move back and forth? How do you know?”
- On page 5, have students recognize *back and forth*. Encourage them to find and read the two words that start with the same letters as *back and forth*, but end with *ward*.
- For pages 7, 9, 11, and 13, have students cover up the first line of text. Ask them to identify the moving item in the photograph on pages 6, 8, 10, and 12, then reveal the text to confirm ideas. Point out that one page shows a singular object. The other objects will be plural, meaning they will end with the letter *-s*.
- On pages 15 and 17, ask students to cover up the first line of text to read *back and forth*. Then explain that the verb has changed from the previous pages. Have students identify the object that is moving on pages 14 and 16 and name the movement itself.
- Point out that the long word on page 19 matches the label on page 18. Help students read the word, explaining that the vowels have short-vowel sounds.
- Conclude pages 20 and 21 by asking students to identify that a ball bounces. Then read *back and forth*.

Rereading

Encourage students to read the book to partners. Suggest that partners read “back and forth”—one partner reads one page, then the other partner reads the next. Make sure students can follow their partners’ reading and know when it is their turn.

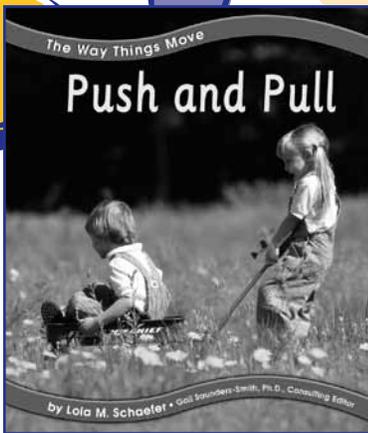
Teaching Points

Digraph *ch* (*branches, chain*); /l/, spelled *ll* (*ball, rolling*)

Performance Assessment

Brainstorm with students about times when they have moved back and forth. Ask them to draw pictures of themselves moving back and forth. Have students copy and complete the following below their pictures: I move back and forth when I _____ .

* Reading Recovery® is a registered trademark of Ohio State University. The complete Reading Recovery® Booklist, created by Ohio State University, includes books from numerous publishers, since a premise of the program is that children be provided with a wide range of texts. One publisher's booklist alone is not sufficient to implement a Reading Recovery® program. Pebble Books have not been officially leveled by Reading Recovery®. However, levels have been provided for your convenience by Reading Recovery® teacher trainers.
 ** Guided Reading Levels have been assigned using guidelines established by Irene C. Fountas and Gay Su Pinnell in their book *Matching Books to Readers: Using Leveled Books in Guided Reading, K-3* (Heinemann, 1999). All levels are subject to change as they are periodically tested and evaluated.



Push and Pull

Early-Intervention Level: 7

Guided Reading Level: E

Supports

- Good photo/text match
- Repetitive phrases

Challenges

- Concept vocabulary: *bulldozer, carpenter, fisher, hammer, nail*
- Unfamiliar concept

Text Features

- High-frequency words: *a, and, from, you*
- Word ending *-ers* (*bulldozers, carpenters, fishers, hammers, shoppers*)

Lesson for Guided Reading

Push and Pull

As students watch, open and close a door, exaggerating the push and pull movements. Challenge students to describe the actions. Confirm the words “push” and “pull.” Speculate with students which action is occurring on the cover. Have students point to the correct word on the cover.

First Reading

- Pause at the title page. Make sure students can read the words *Push* and *Pull*. Ask, “Which action do you see here?”
- Move on to the table of contents. Ask, “On which pages will we read about push? Pull? Push and pull?”
- Ask students to describe the action on page 4, then to confirm their answers by finding the word *push* on page 5.
- Ask students to count the number of words on page 7. Then have them cover up the first and last words. Ask, “Which word is left?” Have students identify the hammer and nails on page 6, then read the entire sentence.
- On pages 8 and 10, have students note the object that is pushing, then the object that is being pushed. Read pages 9 and 11 together.
- Challenge students to explain what the people are doing on page 12. When they say “pulling,” help them read page 13, pointing out that it is similar to the sentence on page 5.
- Model pages 14 through 19 after the strategy for pages 6 through 11. Have students cover up the first and last words, isolating the word *pull*. Then have students figure out who is doing the pulling and what is being pulled.
- For pages 20 and 21, encourage students to imitate the motion of someone sawing. Ask, “Are you pushing or pulling?” Lead students to realize that the answer is both as you confirm their ideas by reading the sentence.

Rereading

Invite students to reread the book. Monitor as they read to assess whether they understand print concepts, such as wrapping and turning the page to continue reading.

Teaching Points

Plural ending *-s* (*carts, nails, nets, saws, sleds, wagons*);

r-controlled vowel *ar* (*carts, carpenters*)

Performance Assessment

Write the following sentences on the board: I can push a ____ to make it move. I can pull a ____ to make it move. Ask students to complete and illustrate each sentence.



Start and Stop

Early-Intervention Level: 7

Guided Reading Level: E

Supports

- Some photo/text support
- Some repetition in sentence patterns

Challenges

- Concept vocabulary: *brake, movement, pinwheel, target, top, twist*
- One page has two sentences

Text Features

- High-frequency words: *a, and, to*
- Consonant blend *st* (*start, stop, twist*)

Lesson for Guided Reading

Start and Stop

Place a ball on a table for everyone to see. Roll the ball, and then stop it. Ask students what type of movement they see. Confirm by writing the words *start* and *stop* on the board. Challenge students to recognize the words in the title.

First Reading

- Encourage students to read the title page. Ask, “What is the police officer asking someone to do? How can you tell?”
- At the table of contents, ask, “On which page will I read about starting? Stopping? How do you know?”
- Have students find the word *start* on page 5, then see the word *move* within *movement*. Ask students for another word that means start. Challenge them to find the word *begin*.
- On pages 6 through 9, help students recognize the sentence pattern: *A ___ starts a ___*. Ask students to identify the movement (*a push, a twist*) and the object (*a sled, a top*).
- Point out the changed sentence pattern on page 11. Note the pinwheel on page 10, then have students read page 11.
- For page 13, have students recognize the words *stop* and *movement*. Challenge students to read the sentence.
- Ask students to identify the close-up object on page 14, then read the sentence on page 15.
- For pages 17 and 19, help students notice the sentence pattern: *A ___ stops a ___*. Again, have students identify each movement and object on pages 16 and 18 before they read.
- Let students talk about the movements and actions they see on page 20. Ask, “What are the boys doing? Which would start a ball? Which would stop a ball?” Have students find the words *start* and *stop*, as well as the words *a ball*.

Rereading

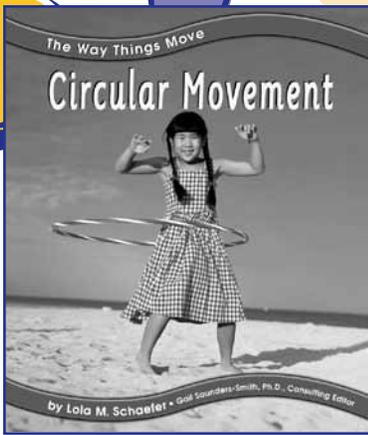
Let students read the book with partners. Suggest that one read the “start” pages and the other read the “stop” pages. Make sure students know when it is their turn.

Teaching Points

Antonyms, or opposites (*begin/end, push/pull, start/stop, throw/catch*); consonant digraph *tch* (*catch*)

Performance Assessment

Remind students that the game Red Light, Green Light involves starting and stopping. Review the instructions, or let students play a quick game. Challenge students to write directions for the game using the words “start” and “stop.”



Circular Movement

Early-Intervention Level: 8

Guided Reading Level: E

Supports

- One to two lines of text per page
- Repetitive phrase: *move in circles*

Challenges

- Concept vocabulary: *blade, circle, gears, merry-go-round, movement, propeller*
- Unfamiliar subject matter

Text Features

- High-frequency words: *a, in, is*
- Hard *c*, soft *c* (*circles, circular, clock, ice*)

Lesson for Guided Reading

Circular Movement

Invite students to move in these ways: forward and backward, side to side, and in circles. Invite students to come up with a general word for their actions. When someone suggests the word “move,” write it on the board. Then challenge students to read the word *Move* in *Movement* in the title. Let them demonstrate how the girl on the cover is moving.

First Reading

- On the title page, help students read the title, pointing out that these are the same words from the cover.
- In the table of contents, ask students to point to the words *circular movement* again. Explain that the purpose of a table of contents is to tell where information can be found.
- On page 5, challenge students to recognize the words *circular movement*. Help students read the word *motion* by explaining that the suffix *-tion* sounds like /shun/.
- Have students identify the object on page 6. Ask, “Can you read this word in the sentence on page 7?”
- With page 9, ask students to cover up the first two words in the sentence. As they read the remaining words, point out that they are the same words they read on the previous page—*move in circles*.
- Continue pages 10 through 17 in a similar manner, prompting students to identify the object in the photograph, then pairing it with the phrase *move in circles*.
- On page 18, ask students which part of the girl’s body is moving. Confirm that she is moving her hands. Ask, “Where else have you read the word *hands*?” (page 11).
- After reading the sentence on page 21, let students explain how the people are moving in a circle on page 20.

Rereading

Let students choose their favorite object or objects from the book. Ask students to read the page to the group, then to share their own experiences.

Teaching Points

Compound words (*airplane, merry-go-rounds, windmill*); plural ending *-s* (*blades, circles, gears, hands, propellers, skaters*)

Performance Assessment

Challenge students to think of another object, not shown in the book, that moves in circles. Encourage students to be creative. Ask them to draw and write about the object.



Zigzag Movement

Early-Intervention Level: 8

Guided Reading Level: E

Supports

- One sentence per page
- One to two lines of text per page

Challenges

- Concept vocabulary: *movement, sailboat, sewing machine, sharp, skier, soccer*
- Very little repetition

Text Features

- High-frequency words: *a, at, from, is, this, to*
- Long /i/, spelled CVCe (*like, side, write*)

Lesson for Guided Reading

Zigzag Movement

Draw a zigzag line. Ask students to identify its shape. Draw another line. Ask them to watch the movement of your hand and arm. Point out that it is a zigzag. Ask students if they see a word on the cover with the letter z. Help students read the word as they describe the movement of the person on the snowboard.

First Reading

- On the title page, let students trace the shape of the snake with a finger. Comment that it is a zigzag shape.
- At the table of contents, have students recognize the word *zigzag* in the entries. Say, “I think we will see people and machines moving in zigzags. How can I tell?”
- On page 5, ask students to cover up the second line of text. Point out that the first two words match the title. After reading it, have them reveal and read the second line.
- Repeat this strategy on page 7. Ask students to cover the second line, read the first, then work through the second.
- Ask students what the boy is drawing on page 8. Ask, “How would his arms move?”
- Have students identify the machine on page 10. Note that the words *sewing machine* on page 11 have unusual spellings.
- Encourage students to identify the sailboat on page 12. Say the word slowly so they can hear the two separate words.
- Start page 15 by telling students that one of the words begins with a silent letter (*write*).
- Let students identify the game on page 16. Help students find the word *checkers* on page 17.
- On page 18, let students trace the zigzag path made by the skier as they say the word *zigzag*.
- Have students identify the sport on page 20. Encourage them to find the word *zigzag* on page 21.

Rereading

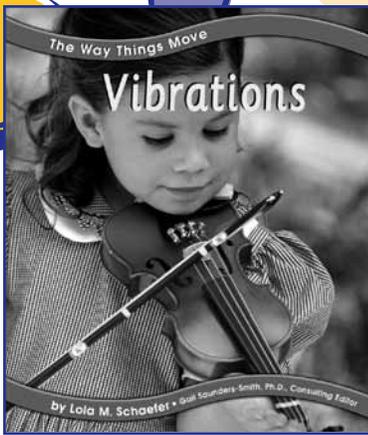
Have students reread the book in small groups. Suggest that group members sit in a circle and take turns reading.

Teaching Points

/sh/, spelled *ch* (*machine*), *sh* (*sharp*), *tion*(*motion*); long /e/, spelled *ea* (*each*), *ee* (*needles*), *i* (*machine, skiers*), *ie* (*field*)

Performance Assessment

Invite students to draw a series of zigzags in multiple colors. Encourage students to draw as many and as varied zigzags as they like. Guide students to compose sentences that describe the zigzags.



Vibrations

Early-Intervention Level: 9

Guided Reading Level: F

Supports

- One sentence per page
- One to two lines of text per page

Challenges

- Concept vocabulary: *collect, eardrum, guitar, hear, hummingbird, movement, sound, vocal cords*
- Very little repetition

Text Features

- High-frequency words: *and, are, in, the, then, you, your*
- Word building (*vibrate, vibration*)

Lesson for Guided Reading

Vibrations

Ask students to identify the instrument on the cover. Speculate how the violin makes sound. Lead students to realize that as the bow is drawn across the strings, it causes the strings to move back and forth very quickly. This movement is called a vibration. The vibration is the sound we hear. Reveal the title, and help students read the word *Vibrations*.

First Reading

- Pause at the title page. Make sure students can recognize the word *Vibrations* as the same word from the book cover.
- At the table of contents, ask, “On which page will we learn about a body part? How do you know?”
- For pages 5 and 7, ask students to cover up the second line of text. Point out that the first word is one they know. Guide students to read the line, then reveal the next line.
- Challenge students to identify the bird on page 8. Then model reading the long word *hummingbird* on page 9.
- Continue pages 10 through 15 by leading students to name the object that vibrates in each photograph, then confirming their ideas by reading the simple sentence.
- For page 17, help students read the word *collect* by suggesting that they break it into parts—*col-lect*.
- On page 19, instruct students to read the word *ear*, then the word *drum*, of *eardrum*. Point out that they have read both of these words, separately, in the book. Have them match the word with the label in the diagram on page 18.
- Conclude with pages 20 and 21, as students relate that information with what they learned on pages 6 and 7.

Rereading

As students reread the book, check their comprehension. Pause every few pages and ask students to tell you, in their own words, what they just learned.

Teaching Points

Phonogram *-ing* (*strings, wings*); /k/, spelled *k* (*make*), *ck* (*back*), *c* (*become, cords, collect, vocal*)

Performance Assessment

Invite student groups to create “Good Vibrations” posters. Have each group write the title “Good Vibrations” across the top. Then instruct each group member to choose an object that makes a sound, draw it on the poster, and write a sentence about the sound.

Extending the Lesson

The following activities incorporate concept knowledge gained from the Way Things Move set.

Science Objectives

The student will:

- Observe objects as they move and describe their movements
- Investigate how a push or a pull can change the direction of an object in motion or start an object moving
- Experiment with sound and vibrations through musical instruments

Entry Point—Engaging the Learners

- Invite students to stand beside their desks and move around in any fashion. Play music to inspire their movements. After a short time, brainstorm words that describe how they moved.
- Let students look around the room for nonliving things that move. Speculate with students what makes these objects move.
- As students view classroom objects that move, challenge them to think about what makes these objects stop. Explain that the reasons objects move and stop moving involve forces that we cannot see.

Preparation

- Collect as many moving toys as possible, such as spinning tops, pinwheels, cars, and trucks.
- Arrange to borrow musical instruments from the school music center. Choose instruments that have obvious vibrating parts, such as drums or guitars.
- Gather supplies for students to make instruments, such as boxes and rubber bands, coffee cans and lids, and milk cartons and dried beans.

Activities/Experiments

- Place a toy car on a table. Do not touch or move it. Ask students if they think the car can move on its own. Invite a student to move the car by pushing it. As the student does so, explain that the student

is the force that makes the car move. Now ask, “Can you move the car without touching it?”

Challenge a group of students to blow strongly to move the car. Explain that this time, the wind from their blowing is the force that moves the car.

- Challenge students to think of another way to move the car without touching it. As students watch, slowly lift the table so the car rolls. This time mention that gravity—the invisible force that makes things fall to the ground—is the force that causes the car to move. Help students conclude that unless the toy car was acted upon by a force, it did not move.
- Set up a table with the moving toys. Invite small groups to the table to explore how the toys move. Encourage students to move or stop the toys with a push or a pull and to move the toys in different ways. Invite the groups to share with the class what they learned about how the toys can move.
- Display the musical instruments for students. Hold up each musical instrument and speculate which part of the instrument vibrates in order to make a sound. Remind students that sounds are created by vibrations that travel through the air.
- Invite students to explore the musical instruments. Create sounds with the instruments and further discuss which part of the instrument vibrates.
- Let students create their own musical instruments by placing rubber bands over a shoe box or placing dried beans in a can. Arrange students to work in groups as each constructs a different instrument. Then have students “play” their instruments to accompany a song they select.

Challenging and Checking

Show students photographs from the books. Invite them to describe the movement of each object, as well as to explain how the object was set in motion.

Reflecting

Encourage students to pantomime the movements. Generate with students lists of questions one could ask about how things move.

Curriculum Connections

The following activities can be used to expand your motion studies into other subject areas.

Small and Large Motor Skills

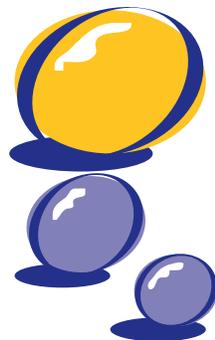
- Set up a sand table or take students outside to a sandy area. Give students sticks, then challenge them to “draw” circular, zigzag, back-and-forth, and vibrating movements. Students could also use paints for the activity.
- During free period or a gym session, take the class outdoors to the playground. Invite them to show you the different ways they can move. Guide their movements by playing traditional games like “Red Light, Green Light” (for start and stop), “Ring Around the Rosy” (for circular motions), and “Tug of War” (for push and pull).

Dramatic Play

- Encourage students to consider a sport or action that demonstrates one of the movements they learned about. For example, snowboarding is moving in a zigzag. Flying a kite is a push and a pull. Divide students into groups and challenge them to come up with an idea to pantomime. Speculate with students what action and movement the pantomime shows.

Creative Writing

- Encourage students to think of a funny character who moves in only one way. For example, someone who likes to dance is always twirling. Or a humorous dog likes to zigzag across the sidewalk. Ask students to write short descriptive paragraphs about the character, making sure they include motion words.
- Guide the class to write a poem about a

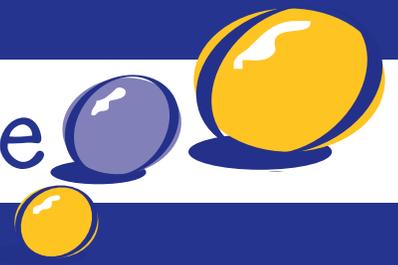


- movement they liked. Suggest that students follow the pattern of the poems in *Hailstones and Halibut Bones*, by Mary O’Neill. Write a phrase for students to complete, such as, “Zigzag is . . .” Brainstorm with students images that describe this movement. If possible, mold the poem to include rhymes. Let students have fun with the sound and joy of the language.
- Make copies of the activity sheet on page 2-11. Have students write a type of movement on the second line. Ask them to draw an object moving in this way and to write sentences that tell about their chosen movement.

Social Studies

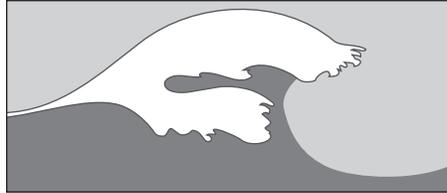
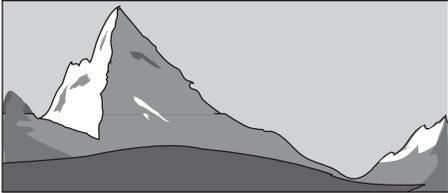
- Point out to students that to get to school each morning, they have to move. They could get to school by walking, by being driven by a parent, or by arriving on a school bus. Take a class poll to determine the ways students get to school.
- Talk with students about modes of transportation and the machines that help people move. For example, school buses bring kids to school. Adults drive cars, or take buses, trains, or subways to work. Travelers might fly in airplanes. Cargo from overseas might come by boat. Invite the class to think of all the vehicles they can.
- Pass out the activity sheet from page 2-10. Review the list of vehicles you created with the class. Challenge students to sort the vehicles into the three columns on the sheet. To check their work, let students work in small groups and compare their ideas.
- Speculate with students how people in different regions of the world move around. For example, what is an easy method of transportation for people who live in snowy areas? (snowmobiles, dogsleds, skis) What would people who live on a tropical island probably have? (boats) Invite students to find examples to share with the class that show how people move in these areas.

Things that Help Us Move



Name _____ Date _____

How do people move on land? How do people move on water? How do people move in the air? In the chart below, draw and label things that help us move.



How We Move on Land

How We Move on Water

How We Move in the Air

Draw and Write About It

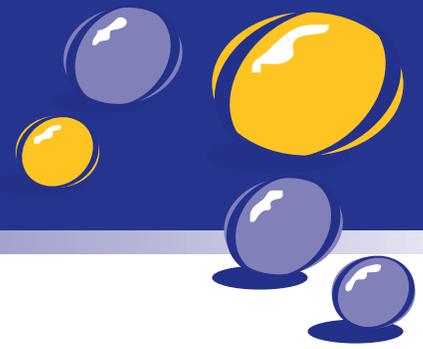


Name _____ Date _____

Movement _____

On the line above, write a movement you learned about. In the box, draw something that moves that way. On the lines below, write sentences to tell about the movement.

From School to Home



The following activities encourage students to share what they have learned with family and friends at home.

Schoolwork to Bring Home

- Let students bring home any writing assignments that you choose not to keep for assessment purposes. Encourage students to describe the books they read and how their writing reflects what they learned.
- Encourage students to take home the completed *Things That Help Us Move* sheet. Suggest that they explain the different ways things can move.
- Allow students to take home the completed *Draw and Write About It* sheet. Encourage them to tell family members why they wrote about this movement. Send home additional blank sheets and encourage students to draw and write about another movement with someone at home.

Show What You Know

- Invite students to share with their families the movements they learned. Have students write each movement on an index card. Ask them to have a family member show them one index card at a time. Tell students to read the movement on the card, then pantomime the movement.
- Conversely, suggest that students act out the movement and challenge family members to find the card with the correct movement listed.
- The next time students take a ride with their families, encourage them to point out the different ways things move. Suggest that students take along a sheet of paper to draw the object, labeling it with the correct movement.

Activities to Do at Home

- Encourage students to explore the way things move on a backyard swing set or a nearby playground. Send a note home for the family, explaining the books and at-home activity. Tell

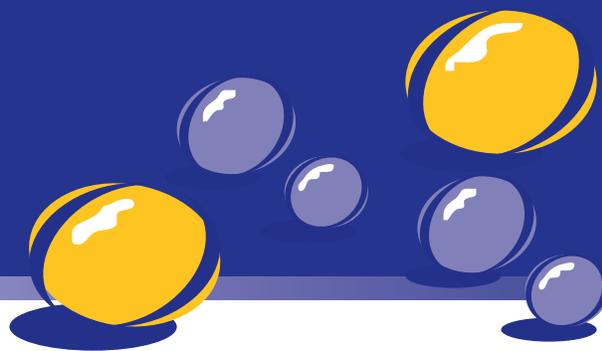
students that they must only do this activity with a family member for safety reasons. Together, have students and family members push and pull on swing sets to move the swings back and forth; ride on merry-go-rounds to experience circular movement; move down a slide to experience start and stop, and even run around on the playground or in the backyard in zigzag patterns.

- Tell students to turn up the volume on a radio or stereo at home. Have them place their hands on the object and observe what they feel. They should notice that the object vibrates. If they turn the volume down, the vibrations stop. Encourage students to show this phenomenon to family members, explaining that the vibrations cause sound.
- Suggest that students look through their toys and other objects at home for items that move in fun ways. Encourage them to share these objects with their families, explaining how the objects move. Then ask students to draw the objects and write a sentence about them to share in class.

Back in Class

- Invite students to share the activities they tried at home with their families. If possible, have students demonstrate any new things they learned about movement with objects in class. Students can also display any pictures they drew of objects in motion and share any observations they made.
- Review all the ways students saw movement with their families. Start a chart to record and compare the observations, noting which movements and objects were most common.

Assessment



The following pages include assessment tools that can be used to assess student knowledge, behaviors, skills, and strategies.

Included with this Pebble Teaching Guide are three assessment instruments for use with this Pebble Books set. Teachers may use these tools to assess a student's skills, behaviors, and strategies in reading; to encourage effective pre-reading and post-reading thinking skills; and to test each student's informational literacy skills. Following is a brief explanation of how each assessment tool provided here can be used.

Reading Skills, Behaviors, and Strategies Chart

Use this checklist to assess a student's fundamental literacy abilities. Enter the title of a book on the left-hand side of the chart. Then record a student's demonstrated abilities in the appropriate box on the chart. The abilities highlighted at the top of the chart range from fundamental to somewhat more advanced. Overall they emphasize basic reading and print literacy skills, behaviors, and strategies. Complete this student performance assessment chart by adding formal and informal observations in the open column on the far right. Additional lines on the chart may be used to record a student's abilities as demonstrated by reading books outside those included in this Pebble Books set or the unit to which it belongs.

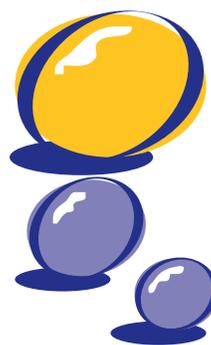
Think About It Chart

This chart, to be completed by the student, is modeled after the familiar K-W-L chart. The *Think About It* chart asks students to identify through writing what they already know about one of the subjects in this Pebble Books set; what they would like to learn about that subject; and then (to be completed during or after reading) what they actually learned from reading that Pebble Book. By

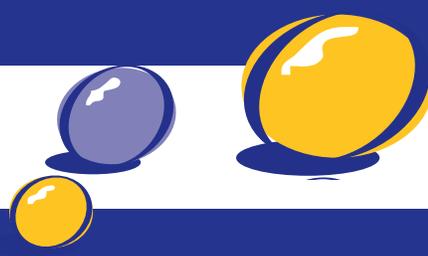
its nature, this pre- and post-reading activity encourages students to set and check purposes for reading.

Informational Literacy Behavior and Strategies

To be completed by the teacher and conducted as a student interview, this assessment tests a student's ability to use informational, and primarily nonfiction, texts. Teaching students to find information rather than simply to memorize it was ranked highest in importance in a recent survey by the Association for Supervision and Curriculum Development. Teachers can use this assessment tool to check whether students are developing these informational literacy skills. Teachers also may want to develop their own similar assessment to test students' facility with other informational literacy skills that are emphasized in the Pebble guided reading lessons.



Think About It



Name _____ Date _____

What I know about _____



What I want to know about _____



What I learned about _____



Informational Literacy Behaviors and Strategies



Name _____ Date _____

Have students briefly answer the following questions. Students may dictate for you to record their answers and your observations.

1. Can you find the title page? What is the author's name?

2. Where is the table of contents? What does it tell you about this book?

3. How did the photographs (diagrams, graphs) help you read this book?

4. Where is the glossary? What do you use a glossary for?

5. Find the index. What does the index tell you? Show how to use the index.

6. Find the page with Internet sites about this topic. What are Internet sites?
