# **How Did You Move Like That?**

Science

Level 7

**Strand: Energy** 

**Purpose for Reading:** To develop an understanding of forces.

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

## **Vocabulary**

Dictionary Words: boat, gymnast, hammer, swimmers, weights

Vocabulary Words: arm, barbell, beam, body, hammer, hand, leg, oar, shoulder, water

High-Frequency Words: a, all, are, at, but, cannot, he, look, see, she, some, these, they, uses, what, when, you

# **Before Reading**

- Read the title and tell the students that this book is going to be about how people move.
- Introduce the term *force*. Ask the students if they know how a force helps people move. Ask them to stand up and walk back to their table. Ask the students to pull their chair out carefully. Tell them that a pull force is helping them do this. Now ask the students to push their chair in. Ask them if they know the type of force that is helping them do this. If they do not know, tell them it is a push force. Now ask the students to turn around. Ask them what force is helping them do this. If they are unsure, tell them it is a turn force.
- Look at the title page and ask the students what sort of force is helping this girl move. Ask the students to predict what other movements might be in the book and the forces that might help them.

### **Theme: Force**

## Introduce the Picture Dictionary

• Ask the students to turn to the picture dictionary. Read and discuss the labels. Ask the students to look carefully at each photo. Ask them to visualize themselves carrying out the activity. What force do they think would help them do it?

### Take a Photo Walk

- Pages 4–5: Invite the students to look at the collage and discuss what type of force is being used.
- Pages 6–7: Invite the students to look at this photo and describe what is happening. What is the woman doing? What sort of force is she using?
- Pages 8–9: Ask the students to look at this photo and describe what is happening. What is the woman doing? Have the students act out the rowing action. What sort of force are they using?
- Pages 10–11: Ask the students if they know what this man is doing. If not, tell them it is called hammer throwing. Show them the turn-around action. Have them stand up and act out hammer throwing. What sort of force are they using?
- Pages 12–13: Ask the students if they have ever seen the start of a backstroke race. If not, ask them to sit with their knees tucked in front of them. Tell them that this is how a backstroke race starts. Ask them to carefully push their legs out. Tell them the backstroke racer would be pushing against the side of the pool. Ask what force they are using.
- Pages 14–15: Ask the students to look at the photo and discuss what sort of force the gymnast is using to flip on the beam.

## **Read the Book**

- Ask the students to return to the title and read it independently.
- Turn to pages 2–3. Have the students read the dictionary words.
- Turn to pages 4–5. Ask the students to read this page independently. Remind them to use their eyes instead of pointing, but to point if they get lost or need to check the words they are saying.
- Ask the students to use the features of the book to help, e.g. the labels and the picture dictionary.
- Ask the students to continue reading the book independently. Provide support where necessary.

# **After Reading**

## Comprehension

- Invite the students to return to the book and talk about the action each person was doing, the force they were using, and the effect of the force. Prompt them with questions, such as What was the girl on page 7 doing? What force was she using? What was the effect of the force?
- Ask the students to describe the different forces.
- Have the students use their knowledge of different forces to work out other actions that use the same force. For example, What sort of force do you use when opening a door? Name another action that requires you to use a turn force.

## Vocabulary and Word Recognition

• Have the students find the high-frequency word when in the text. Ask the students to suggest sentences containing the word when. Write them on the board and invite volunteers to come and fill in the word when. Ask the students to write when five times independently, checking each time to make

sure they are correct. Add when to a high-frequency word chart or word wall.

• Have the students find the high-frequency words *push*, *pull*, *turn*, and *what* in the text. Ask the students to write a sentence using as many of the words in it as they can. Ask the students to write each word five times independently, checking each time to make sure they are correct. Add the words to a high-frequency word chart or word wall.

## Oral Language

• Have the students work in pairs. One student names or carries out a task. The other says what force they are using.

## Writing

• Have the students write poems about forces.

#### **Creative Extension Activities**

- Have the students draw themselves doing an activity. Write the type of force used somewhere in the illustration.
- Cut pictures out of a magazine. Paste them in groups of actions using the same force.

# **Independent Follow-Up Activities**

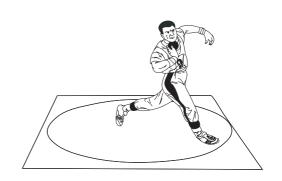
- Reread the book to improve fluency.
- Complete the activities on page 16.
- Complete the photocopiable activities.

Name:

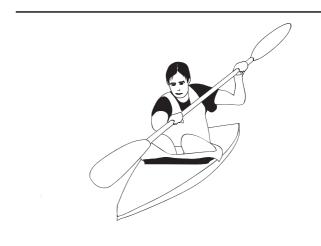
Write the correct words under the picture.

push force pull force turn force











Name:
Draw a person using a push force. Write
what they are doing.