# Level 14

## Glass Science

### Strand: Matter

**Purpose for Reading:** To build understandings of the features of glass and its use for practical and decorative purposes.

**Comprehension Strategies:** Making connections to text, extracting information, determining importance.

#### Vocabulary

Dictionary Words: beads, bottles, marbles, mirror Vocabulary Words: building, children, colours, girl, glass mirror, magnifying glass, round marbles, walls High-Frequency Words: all, be, big, but, do, has, have, made, make, may, not, of, people, some, that, them, there, they, very, what, when, your

### **Before Reading**

• Ask students to brainstorm all the things they know about glass. Make a list to show their prior knowledge.

• Read the title and ask students to describe what they notice about the glass in the photo. *What could these bottles be used for?* Invite students to talk about the decorative and practical uses of glass. Have them suggest whether the bottles on the cover are decorative or practical. *What do you notice about their colour, shape and design? What does this tell you about glass?* Add any new information to the list of prior knowledge.

• Read the title page and ask students how the glass is being used in this photo. *Does it have a decorative or practical purpose?* Add any new information to the list of prior knowledge.

#### **Theme: Physical Properties**

#### Introduce the Picture Dictionary

• Ask students to turn to the picture dictionary. Read and discuss the photos and labels. Ask students to describe how glass is being used in each of the photos. Have them identify whether the glass is used for practical or decorative purposes.

### Take a Photo Walk

• Pages 4–5: Invite students to look at the photos and discuss the different uses of glass. *What do the window and the glass have in common?* 

• Pages 6–7: Have students describe what is happening in the photo. Read the caption and discuss how students think a mirror works.

• Pages 8–9: Invite students to read the heading and look at the table. Discuss the information contained in the table. Have students read the list of glass things in the table and talk about whether they are easy or not easy to break.

• Pages 10–11: Invite students to look at these pages and discuss what they notice about the size of the glass objects in the photos. Read the captions and discuss how glass beads and glass buildings might be made.

• Pages 12–13: Invite students to look at these pages and talk about what they notice about the shape of the glass objects in the photo. *What other shapes can glass be?* 

• Pages 14–15: Invite students to look at these pages and discuss what they see in the photo. Read the caption and discuss the colour, shape, and design on these bottles.

### **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 if you need help to check.* 

• Ask students to continue reading the book independently. Provide support as needed.

## After Reading

### Comprehension

• Invite students to revisit the book and talk about the different features of glass. Next to the prior knowledge list, record students' new understandings about glass. Compare the two lists.

• Support students to extract information from the text. For example, *What sorts of things are made from glass that is see-through? Why is it useful to be able to see through glass? What happens to most glass things when you drop them? What sorts of glass don't break as easily?* 

• Prompt students to link their knowledge of glass to their own lives. *What are some things you use glass for?* 

### Vocabulary and Word Recognition

• Ask students to turn to page 8 and find the word *break*. Have students locate the word each time it appears on this page, pointing to the word as they say it aloud. Ask students to think of sentences where *break* is a word within the sentence. Tell students to look at the word *break* in the book again. *What is tricky about this word?* Tell students to look carefully at the word and then close their eyes and

make a picture of the word in their head. Ask them to write the word and then check to see if they are correct. Have students write this word five times, saying it as they write it.

### Oral Language

• Have students work with a partner to talk about the glass things in the book that have a practical purpose and those that are decorative.

### Writing

• Have students write a list of the glass things they have in their home. *Which glass things on your list break easily? Which glass things are strong?* Have the students sort the things on their lists and make a table like the one on page 9.

### **Creative Extension Activities**

• Have students make a stained glass picture using cardboard and cellophane.

• Have students look at small things through a magnifying glass.

### Independent Follow-Up Activities

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

## Name:

Look at some tiny things through a magnifying glass. Choose one thing. Draw it in the box. Show the extra details you can see. Write labels. What does the thing look like? Write about it.

Name:

What do we use these glass things for? Write the answers. Use the book to help you.

Magnifying glass:		
Mirror:		
Vase:		
Windscreen:		
Plate:		
Glasses:		