

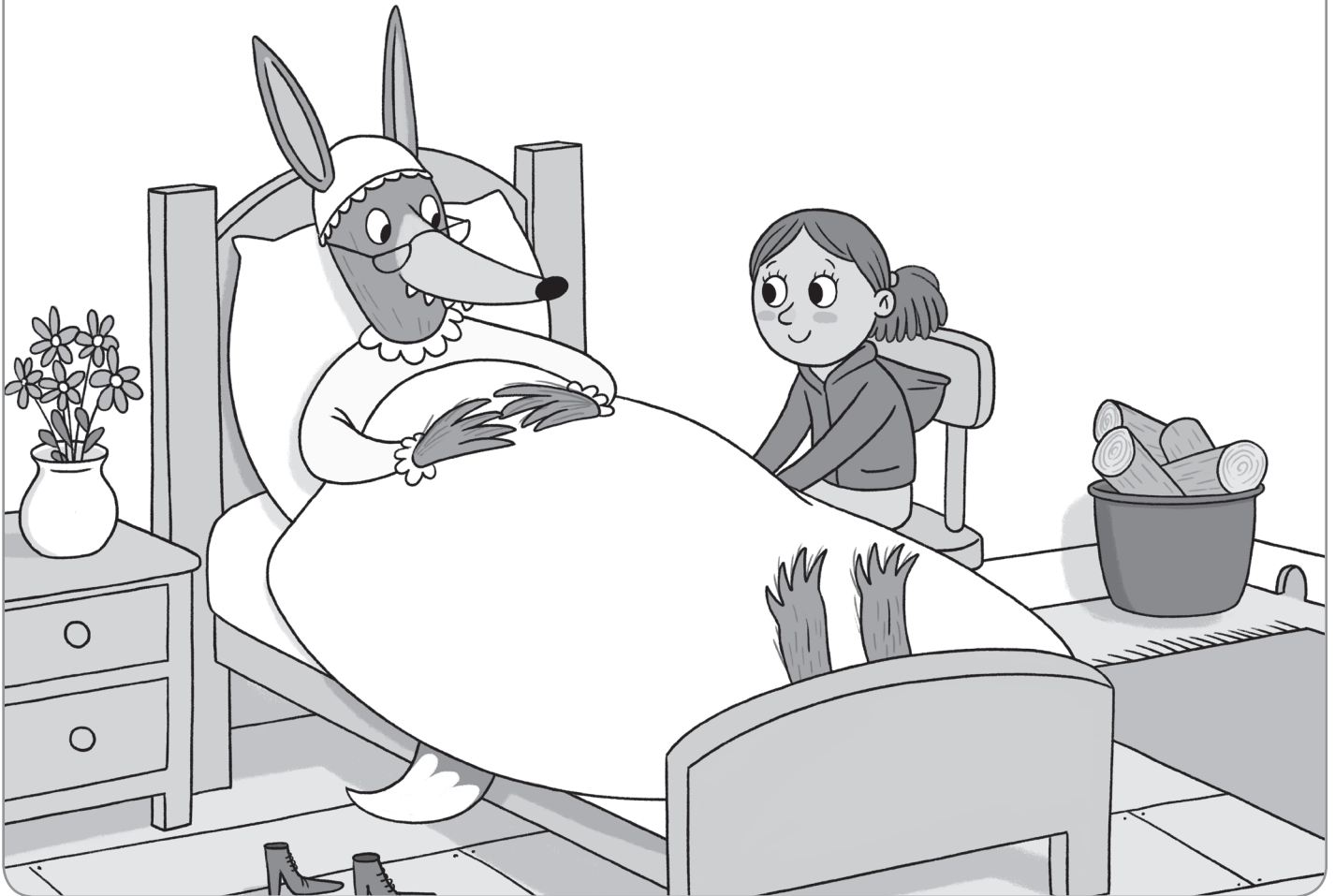
Little Red Riding Hood

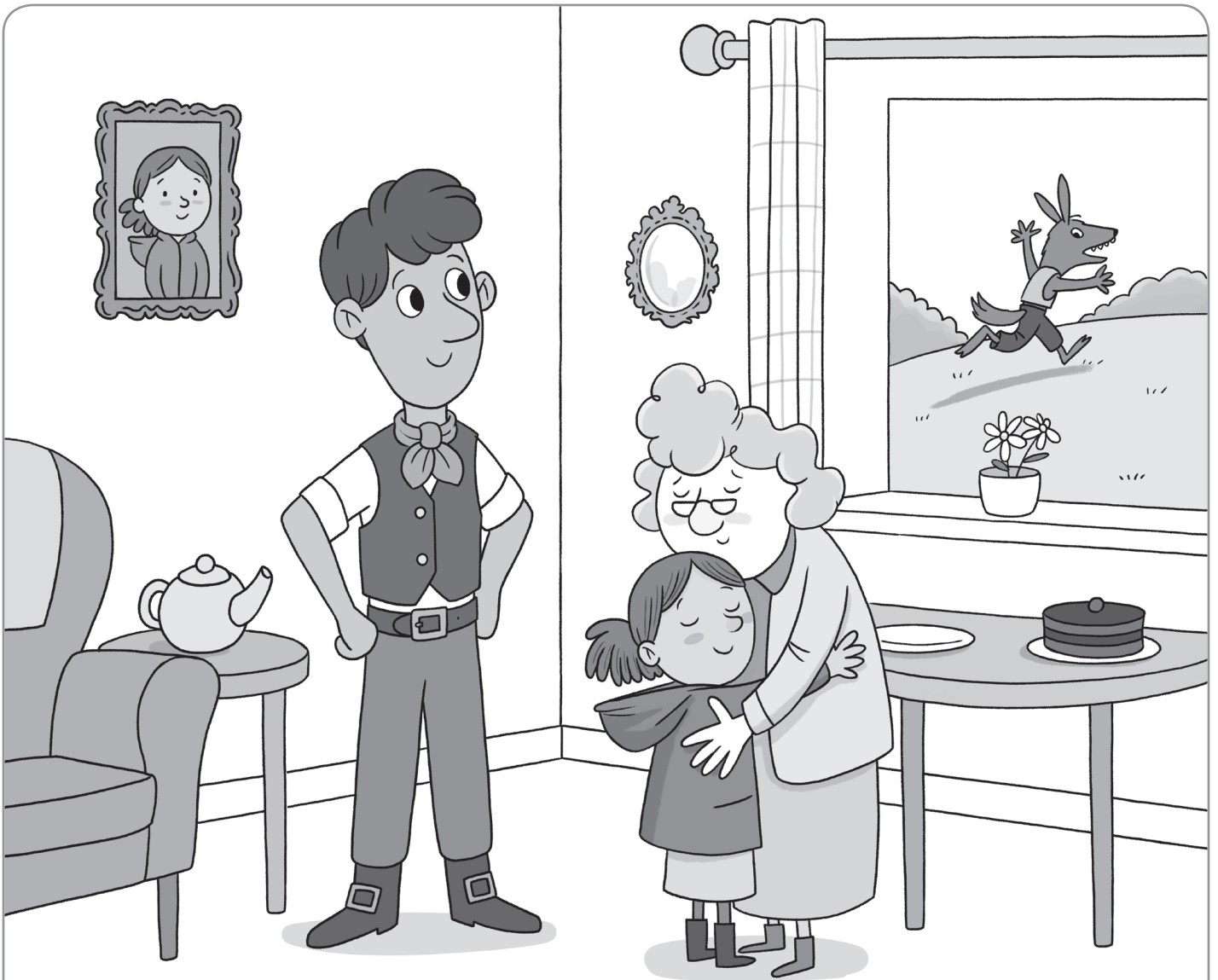
One day, Little Red Riding Hood went to see Grandma. Along the way, she met a wolf. “Where are you going, little girl?” asked the wolf.

“I am going to see Grandma,” said Little Red. Then off the wolf ran. He wanted to get to Grandma’s house first.

When the wolf got there, he locked Grandma in a closet. He put on her gown and glasses. Then the wolf hopped into her bed.

Before long, Little Red walked in. She looked at Grandma. “Grandma,” she said, “What big ears you have! And what big eyes and big teeth, too!” Little Red did not know she was talking to the wolf.





“My dear, I have big ears to hear you better,” said the sly wolf. “I have big eyes to see you better. And I have big teeth to eat you up!”

The wolf jumped out of bed. He tried to grab Little Red.

Just then, a man came in. He chased the wolf away.

The man told the wolf never to come back again.

The man helped Grandma out of the closet. Little Red and Grandma hugged each other. Then they thanked the man for his help. From that day on, Little Red never spoke to a wolf again.

Little Red Riding Hood

INTRODUCTION

Read aloud the fairy tale. Talk about what happens in the story.

To jumpstart scientific thinking, remind children that Little Red Riding Hood was on her way to see Grandma. Ask children to share their ideas about how Little Red might always be sure to take the quickest path to Grandma's house. Afterwards, explain that Little Red might use a type of "code" to mark the path with special symbols, such as arrows that point out each direction she should take along the way. Invite children to tell about any experiences they might have had with using a code to do an activity or solve a problem.

Continue with questions, such as:

- ⚙ What are some things Grandma might do to keep the wolf away from her house?
- ⚙ What features might a fence have to prevent the wolf from entering or climbing over it?
- ⚙ Can big ears really help you hear better?



ACTIVITY 1

Getting to Grandma's

Challenge: Create a path to help Little Red Riding Hood get to Grandma's house.

Before class, tape a 25-square grid, with 8- to 12-inch squares, on the floor. Place a doll (Little Red Riding Hood) at one corner and a box (Grandma's house) at the opposite corner. Put four or five "trees" (use wooden blocks) in random squares on the grid. Tell children they will create a path from Little Red to Grandma's house. They will use arrows to map out the path, going around the trees as needed. Create your own arrow path and demonstrate how to "walk" Little Red along the path. Then have children work in small groups and complete their recording sheet.

DIRECTIONS

- 1 Make a path from Little Red to the house. Use arrows to point the way.
- 2 Check that your arrows point in the correct direction:
→ ← ↑ ↓
- 3 "Walk" Little Red along the path. Follow the arrows.
- 4 Does the path take Little Red to Grandma's house? Correct any arrows, if needed.
- 5 Now fill in your recording sheet. Draw the path you made.

MATERIALS

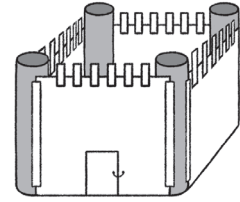
- Getting to Grandma's recording sheet (p. 5)
- 25-square grid (with 8- to 12-inch squares) taped to floor
- 15 8-inch tagboard squares, each labeled with an arrow
- wooden blocks or other objects to represent trees
- dolls or stuffed animals
- box (for Grandma's house)
- crayons

ACTIVITY 2

A Wolf-Proof Fence

Challenge: Build a fence that will keep the wolf away from Grandma’s house.

Tell children they will build a fence that will keep the wolf away from Grandma’s house. Encourage them to consider special features, such as high walls, a spiky top, or a gate that locks. Have children write their ideas and draw their plans on their planning sheet. Then have them do the activity. Afterwards, have them complete their sheet. Discuss which ideas worked, which didn’t, and how they can improve their designs.



DIRECTIONS

- 1 Gather the materials you need.
- 2 Build your fence. Use your plan from your planning sheet.
- 3 Now, choose a stuffed animal to represent the wolf.
- 4 Move the “wolf” around as if it is trying to get inside the fence.
- 5 Is the fence wolf-proof—will it keep the wolf out? If not, how can you change it to make it better?

MATERIALS

- A Wolf-Proof Fence planning sheet (p. 6)
- cardboard tubes, tall chip canisters, pieces of cardboard, large plastic cups, wooden and plastic blocks, boxes, craft sticks, spring-type clothespins, pipe cleaners
- tape, glue, scissors
- stuffed animals

ACTIVITY 3

My, What Big Ears!

Challenge: Design ears that will help you hear better.

Ask children: *Can big ears really help you hear better?* Tell them they will design ears that can help them hear better. Have children write their ideas and draw their plans on their planning sheet. Then have them work with a partner to test their ears and complete their sheet. Discuss which ideas worked, which didn’t, and how they can improve their designs.



DIRECTIONS

- 1 Gather the materials you need.
- 2 Build your ears. Use your plan from your planning sheet.
- 3 Stand in a quiet area with a partner. Take 10 steps away from your partner.
- 4 Have your partner crinkle a piece of paper. Can you hear it?
- 5 Now, put on your ears. Repeat Step 4.
- 6 Did your ears work? If not, how can you change them to make them better?

MATERIALS

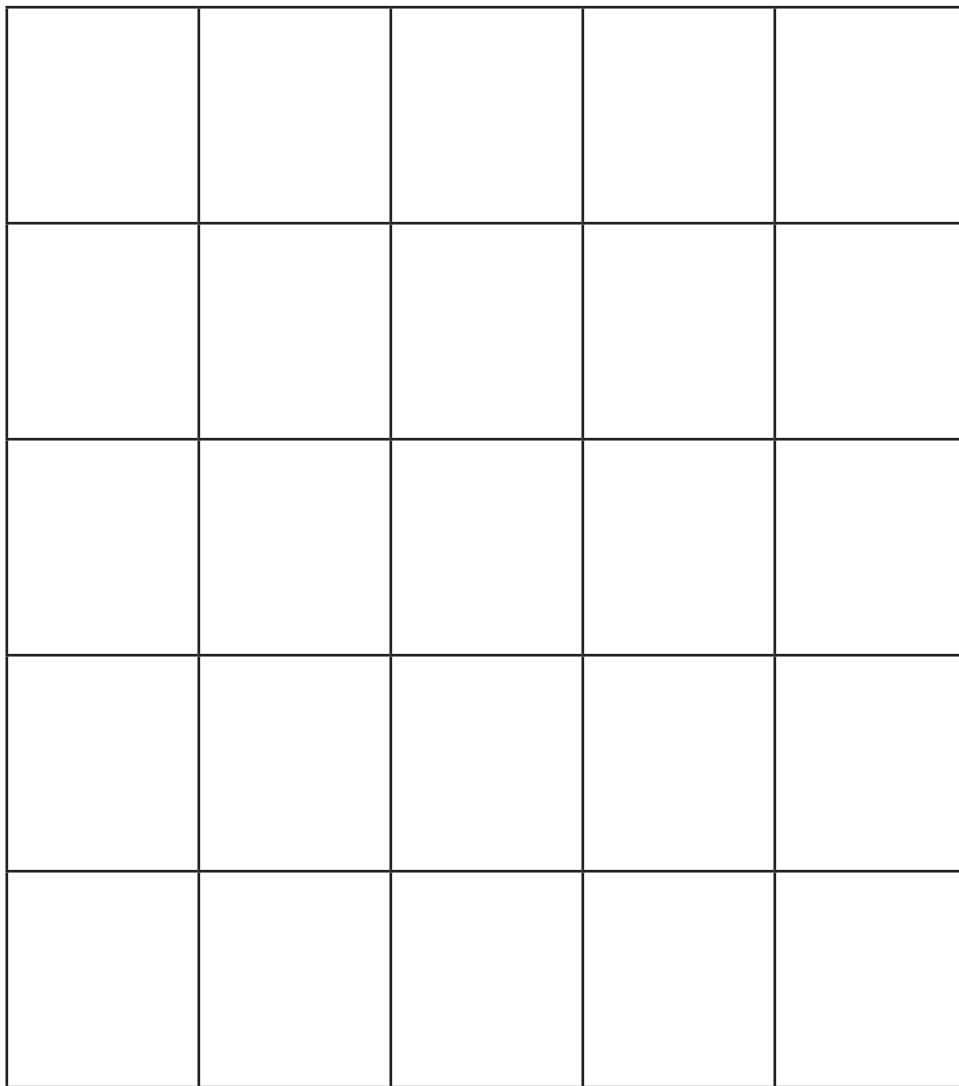
- My, What Big Ears! planning sheet (p. 7)
- cardboard tubes, paper or plastic cups of different sizes, cardboard, paper
- tape, scissors
- a partner
- pieces of scrap paper

Name: _____

Getting to Grandma's

Challenge Help Little Red Riding Hood get to Grandma's house. Use arrows to mark the path.

Draw four or five trees on the grid. Then draw an arrow path from Little Red to Grandma's house. Check that each arrow points in the correct direction: → ← ↑ ↓. Color your path to check that it works.



Extra Challenge What's the shortest way to the house? Draw the path. How many arrows did you use?

Name: _____

A Wolf-Proof Fence

Challenge Keep the wolf away from Grandma's house. Design a wolf-proof fence. Then build and test it.



My Plan (Draw here.)

Materials I Need

Did my idea work?



yes



no

How can I make my design better?

Blank space for drawing or writing.

Name: _____

My, What Big Ears!

Challenge Can big ears make you hear better? Design ears that will help you hear things far away. Then test them with a friend.



My Plan (Draw here.)

Materials I Need

Did my idea work?



yes



no

How can I make my design better?