

Lesson 5

Describing Connections Between Steps



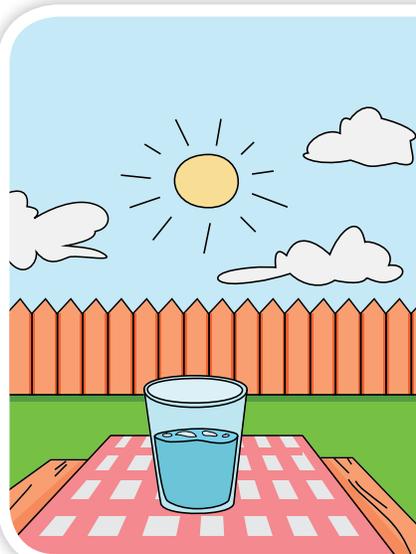
Learning Target



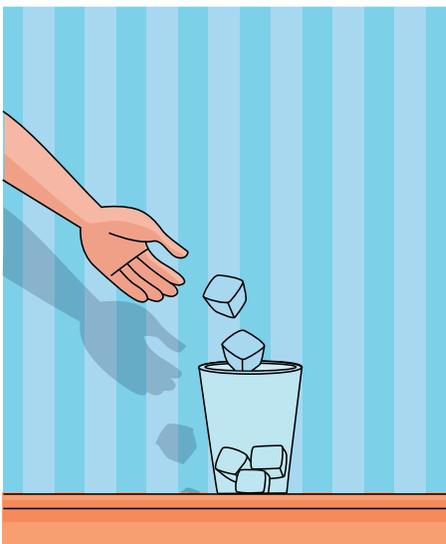
Looking at how steps in a process are connected will help you understand what you read.

- **Read** Directions are a set of **steps in a process** that tell you how to make or do something. Sometimes, numbers show the **order** of the steps. Other times, words such as **first**, **next**, **then**, and **last** are clues that let you know the order.

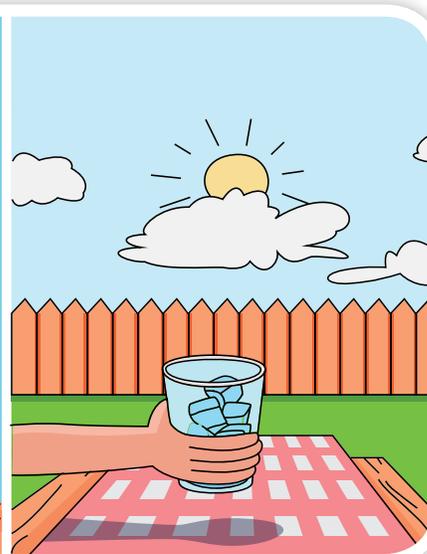
Look at these pictures. The pictures show the steps of a science experiment. Are these steps in the right order? How do you know?



Watch as the sun melts the ice.



Fill a glass with ice cubes.



Set the glass in a warm, sunny area.

How Do You Make a Rainbow?

by Shar Levine and Leslie Johnstone

WORDS TO KNOW

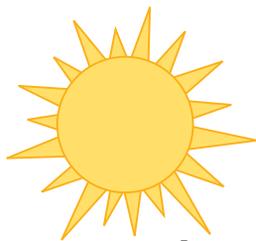
As you read, look inside, around, and beyond these words to figure out what they mean.

- shallow
- mirror
- refraction

Where do rainbows come from?

If the sun shines right after a rain, look and you may be lucky enough to see a rainbow. But you don't need to wait for rain to see a rainbow. You can make your own.

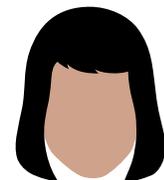
You need



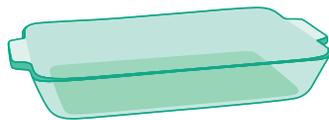
a sunny day



a mirror



adult helper



shallow glass
baking dish



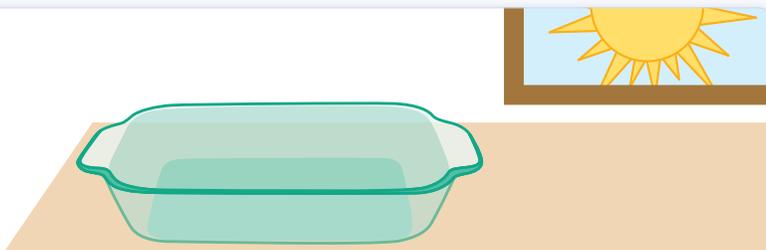
water



white paper
or cardboard

Do This

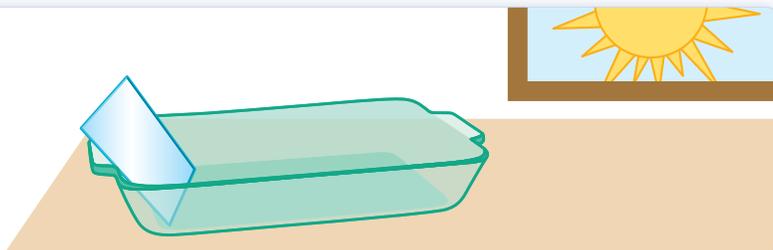
- 1** Put the glass baking dish flat on the ground or on a table.



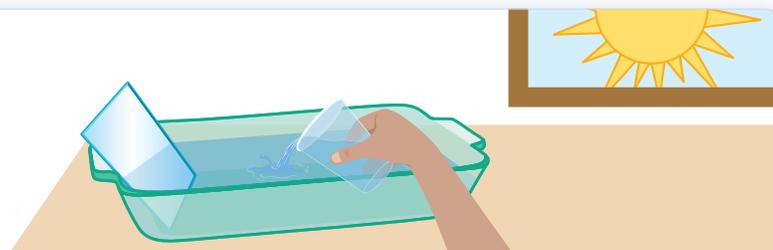
- 2** Place the mirror in the dish. Lean it up against one side.



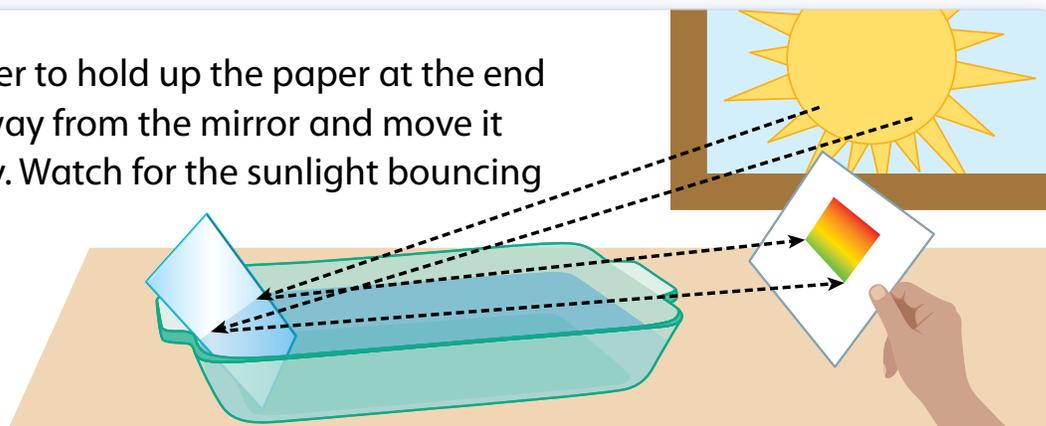
- 3** Turn the dish so the mirror faces the sun.



- 4** Add water until the dish is about half full.



- 5** Ask your helper to hold up the paper at the end of the dish away from the mirror and move it around slowly. Watch for the sunlight bouncing off the mirror.



What happened?

A rainbow appeared! The water in the dish bent the sunlight. Even though sunlight looks white, it has colors in it. And when the light is bent, it breaks up into red, orange, yellow, green, blue, indigo (a purplish color), and violet. This is called **refraction**. It's how white sunlight puts a rainbow on the paper.

After a rain, lots of small drops are still in the air. When sunlight hits the drops, the light bends to make a rainbow, just like the rainbow you made.



Think Use what you learned by reading “How Do You Make a Rainbow?” to respond to the following questions.

1 Put the steps for making a rainbow in the order you should do them. Write the numbers 1 to 5 on the line before each sentence.

_____ Add water to the dish.

_____ Hold up the paper and move it around slowly.

_____ Put the dish on the ground or on a table.

_____ Turn the dish so the mirror faces the sun.

_____ Place the mirror in the dish.

2 This question has two parts. First, answer Part A. Then answer Part B.

Part A

What should happen before the dish is turned to face the sun?

- A** The mirror should be placed in the dish.
- B** Water should be added to the dish.
- C** The helper should hold up the paper.
- D** Sunlight should bounce off the mirror.

Part B

Write the step from the text that helped you answer the question in Part A.

3 How does the picture by step 2 help you understand what to do?

- A** It shows where to place the mirror in the dish.
- B** It shows how to make the sunlight bounce off the mirror.
- C** It shows how to turn the dish so that it faces the sun.
- D** It shows where your adult helper should stand.

4 What would happen if you did step 5 before step 4?

- A** The paper would not stay up.
- B** Sunlight would not shine on the mirror.
- C** The rainbow would not appear.
- D** The rainbow would have fewer colors.

5 Based on clues in the text, what does the word “appeared” mean in this sentence?

A rainbow appeared! The water in the dish bent the sunlight.

- A** hid the light
- B** went missing
- C** could be seen
- D** became very big



Write What are the steps in the directions?

6 Plan Your Response Make a list of the steps in the directions. Think about how the steps help you understand how rainbows are formed.

7 Short Response How does following these directions help you understand how real rainbows are formed?



Learning Target

Now you know directions are a set of steps that tell you how to make or do something. Why is it important to follow the steps in the order they are written?
