Measurement

Curious About Math with

Curious George
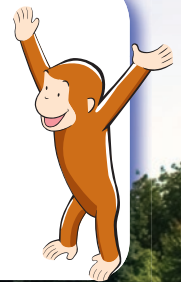
What objects in the picture are shorter than the arch?

Name _____

Show What You Know ✓
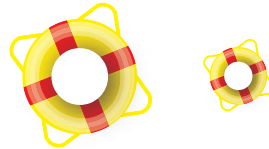
Bigger and Smaller

Circle the bigger object. | Circle the smaller object.
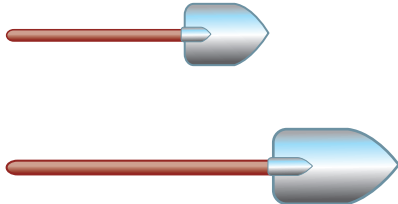
1. | **2.**

Compare Length

Circle the longer object.
Draw a line under the shorter object.

3. | **4.**

Numbers 1 to 10

Write each number in order to 10.

5.

1 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ 10

Vocabulary Builder

Visualize It

Sort the review words from the box.

length

long

_____

_____

_____

sort
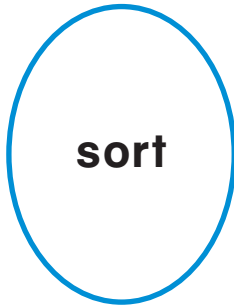
numbers

nine

_____

_____

_____

Understand Vocabulary

Complete the sentences with the correct word.

1. A crayon is _____ than a marker.

2. A toothbrush is _____ than a paper clip.

Write the name below the number.

**3.**   9   10   11   12

_____   _____   _____   _____

GO
Online

• eStudent Edition
• Multimedia eGlossary

Game Measure UP!

Materials
- 🔴🔵 pawns
- spinner (1 2 3)
- 12 🔴🟡
- 2 erasers
- 2 pencils
- 2 markers
- 2 crayons
- 2 scissors
- 2 paintbrushes

Play with a partner.

1. Put 🔴🔵 on START.

2. Spin the spinner. Move your 🔴 that many spaces. Take that object.

3. Your partner spins, moves, and takes that object.

4. Compare the lengths of the two objects.

5. The player with the longer object places a 🔴 on the space. If both objects are the same length, both players put a 🟡 on the board.

6. Keep playing until one person gets to END. The player with the most 🔴 wins.

START

END
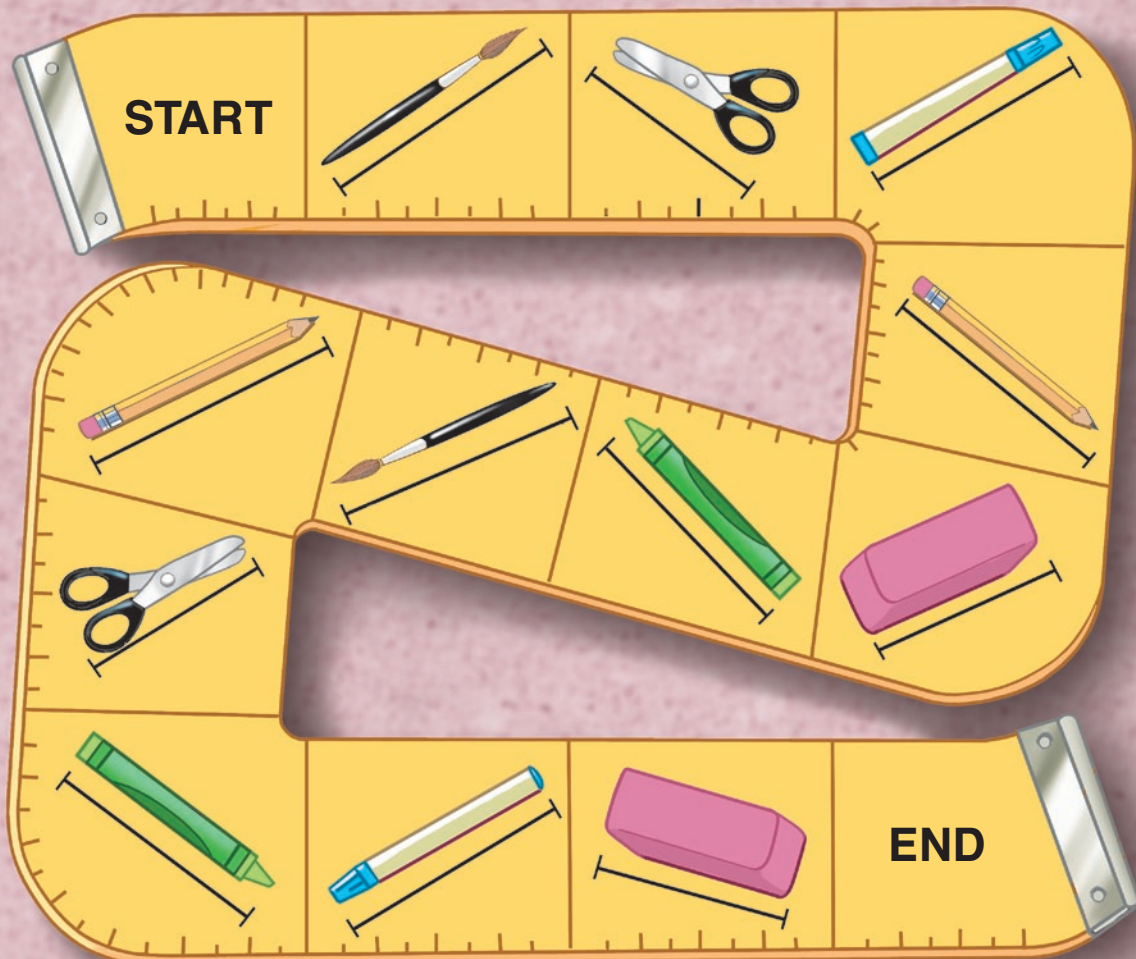
Name _____

Order Length

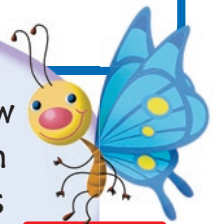**Essential Question** How do you order objects by length?

Listen and Draw — REAL WORLD

Use objects to show the problem.
Draw to show your work.

FOR THE TEACHER • Read the problem. Have children use classroom objects to act it out. Rosa has something that is longer than the drinking straw. She has another object that is shorter than the key. What objects might she have?

Math Talk
Compare the straw and the key. Which is longer? Which is shorter? **Explain.**

MATHEMATICAL PRACTICES

Chapter 9

Model and Draw

Order three pieces of yarn from **shortest** to **longest**. Draw the missing piece of yarn.
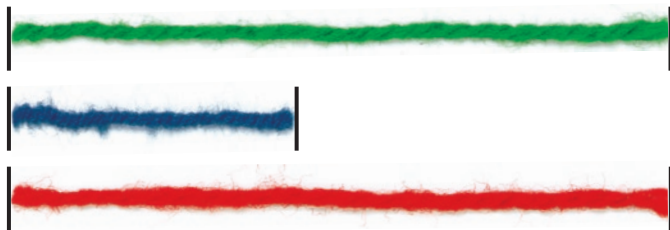
shortest

longest

Share and Show

Draw three lines in order from **shortest** to **longest**.

1. **shortest**

2.

3. **longest**

Draw three lines in order from **longest** to **shortest**.

4. **longest**

5.

6. **shortest**

On Your Own

Draw three crayons in order from **shortest**
to **longest**.

7. **shortest** |

8. |

9. **longest** |

Draw three crayons in order from **longest**
to **shortest**.

10. **longest** |

11. |

12. **shortest** |

13. **H.O.T.** Complete each sentence.

The _____ yarn is the shortest.

The _____ yarn and the _____ yarn
are the same length.

PROBLEM SOLVING REAL WORLD

Write Math

Solve.

14. Draw four objects in order from shortest to longest.

Objects

15. **H.O.T.** The string is shorter than the ribbon. The chain is shorter than the ribbon. Circle the longest object.

string

ribbon

chain

16. **Test Prep** Which ribbon is the shortest?

○
○
○
○

TAKE HOME ACTIVITY • Show your child three different lengths of objects, such as three pencils or spoons. Ask him or her to order the objects from shortest to longest.

FOR MORE PRACTICE:
Standards Practice Book, pp. P173–P174

Name _____

Indirect Measurement

Essential Question How can you compare lengths of three objects to put them in order?

Listen and Draw REAL WORLD

Clue 1: A yellow string is shorter than a blue string.

Clue 2: The blue string is shorter than a red string.

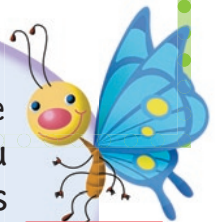Clue 3: The yellow string is shorter than the red string.

yellow |

blue |

red |

Math Talk
Explain how the clues helped you draw the strings in the correct order.

MATHEMATICAL PRACTICES

FOR THE TEACHER • Read the clues. Have children use the MathBoard to draw each clue. Then have children draw the strings in order from shortest to longest.

Model and Draw

Use the clues. Write **shorter** or **longer**
to complete the sentence. Then draw to
prove your answer.

Clue 1: A green pencil is longer than an orange pencil.

Clue 2: The orange pencil is longer than a brown pencil.

So, the green pencil is ___longer___ than the brown pencil.

brown	
orange	
green	

Share and Show

Use the clues. Write **shorter** or **longer**
to complete the sentence. Then draw
to prove your answer.

☑ 1. Clue 1: A red line is shorter than a blue line.
   Clue 2: The blue line is shorter than a purple line.

   So, the red line is _____ than the purple line.

red	
blue	
purple	

On Your Own

Use the clues. Write **shorter** or **longer**
to complete the sentence. Then draw
to prove your answer.

2. Clue 1: A green line is shorter than a pink line.
Clue 2: The pink line is shorter than a blue line.
_ _ _ _ _ _ _ _

So, the green line is _____ than the blue line.

green	
pink	
blue	

3. Clue 1: An orange line is longer than a yellow line.
Clue 2: The yellow line is longer than a red line.
_ _ _ _ _ _ _ _

So, the orange line is _____ than the red line.

red	
yellow	
orange	

PROBLEM SOLVING REAL WORLD

Write Math

4. **H.O.T.** The ribbon is longer than the yarn. The yarn is longer than the string. The yarn and the pencil are the same length. Draw the lengths of the objects next to their labels.

ribbon	
yarn	
pencil	
string	

5. **Test Prep** A green line is shorter than the orange line. The orange line is shorter than a blue line. Which is correct?

○

○

○

○
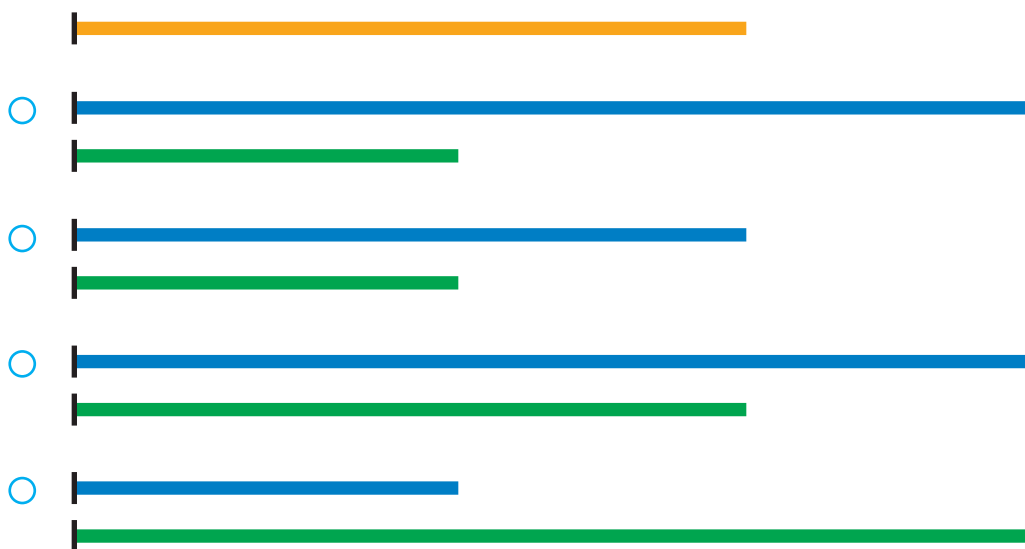
TAKE HOME ACTIVITY • Show your child the length of one object. Then show your child an object that is longer and an object that is shorter than the first object.

376 three hundred seventy-six

FOR MORE PRACTICE:
Standards Practice Book, pp. P175–P176
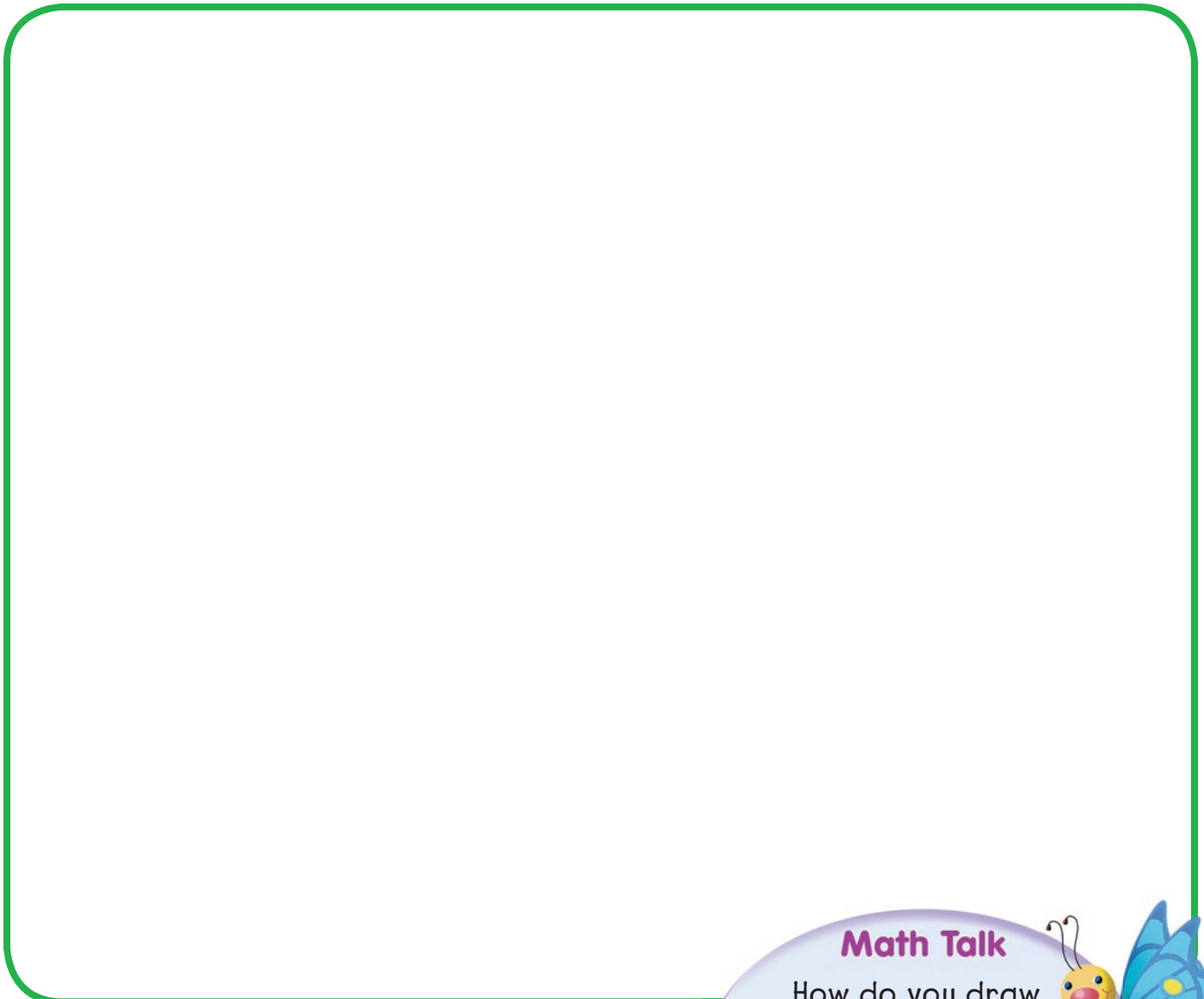
Use Nonstandard Units to Measure Length

Essential Question How do you measure length using nonstandard units?

Listen and Draw REAL WORLD

Draw to show the problem.

FOR THE TEACHER • Read the problem. Jimmy sees that his boat is about 6 color tiles long. Draw Jimmy's boat. Draw the color tiles to show how you measured.

Math Talk
How do you draw the boat to be the right length? **Explain.**

MATHEMATICAL
PRACTICES

Model and Draw

You can use 🟥 to measure length.
Write how many.

about _____ 🟥

Share and Show

Use real objects. Use 🟥 to measure.

1.

about _____ 🟥

2.

about _____ 🟥

☑ 3.

about _____ 🟥

☑ 4.

about _____ 🟥

On Your Own

Use real objects. Use to measure.

5.

about _____

6.

about _____

7.

about _____

8.
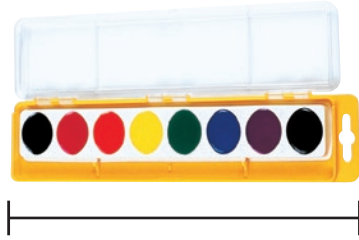
about _____

9. **H.O.T.** The green yarn is about 2 long.
About how long is the blue yarn?

about _____

PROBLEM SOLVING REAL WORLD

Write Math

Solve.

10. Mark measures a real glue stick with ■.
About how long is a glue stick?
Circle the answer that is most reasonable.

about 1 ■   about 4 ■   about 10 ■

---

11. **H.O.T.** Bo has 4 ribbons. Circle the ribbon
that is less than 3 ■ long but more than
1 ■ long.

12. **Test Prep** Use ■. Ray measures
the key with ■. About how long is the key?

○ about 1 ■ long
○ about 2 ■ long
○ about 3 ■ long
○ about 4 ■ long

TAKE HOME ACTIVITY • Give your child paper clips or other small
objects that are the same length. Have him or her estimate the lengths
of objects around the house and then measure to check.

FOR MORE PRACTICE:
Standards Practice Book, pp. P177–P178

Name _____

Make a Nonstandard Measuring Tool

Essential Question How do you use a nonstandard measuring tool to measure length?

Listen and Draw · REAL WORLD

Circle the name of the child who measured correctly.

Alli

Sid

FOR THE TEACHER • Read the problem. Sid and Alli measure the same pencil. Sid says it is about 4 paper clips long. Alli says it is about 3 paper clips long. Circle the name of the child who measured correctly.

Math Talk
Explain how you know who measured correctly.

MATHEMATICAL PRACTICES

Chapter 9

Model and Draw

Make your own paper clip measuring tool like the one on the shelf. Measure the length of a door. About how long is the door?

about _____ 🖇

Share and Show Math Board

Use real objects and the measuring tool you made.
Measure. Circle the longest object.
Underline the shortest object.

1.

about _____ 🖇

2.

about _____ 🖇

✓3.

about _____ 🖇

✓4.
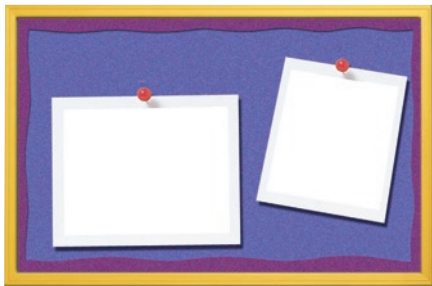
about _____ 🖇

On Your Own

Use the measuring tool you made.
Measure real objects.

5.

about ____ 🖇

6.

about ____ 🖇

7.

about ____ 🖇

8.
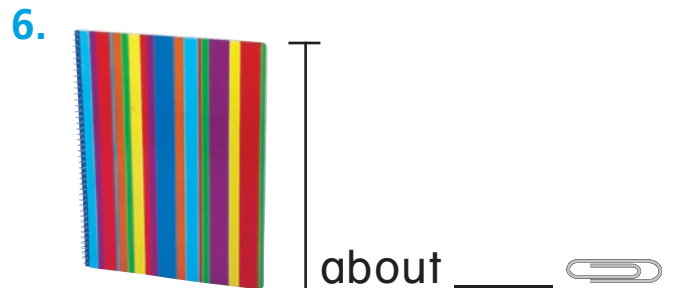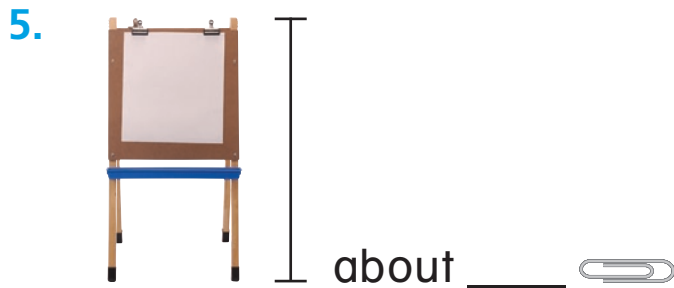
about ____ 🖇

9. 🌅**H.O.T.** Cody measured his
real lunch box. It is about
10 🖇 long. About how
long is Cody's real pencil?

about ____ 🖇

Cody's lunch box
and pencil

PROBLEM SOLVING REAL WORLD

Write Math

Solve.

10. **H.O.T.** Lisa tried to measure the pencil.
She thinks the pencil is 5 paper clips long.
About how long is the pencil?

about _____ ⬭

11. **Test Prep** Use ⬭. Which string
is about 3 ⬭ long?

○ (yellow string)

○ (red string)

○ (blue string)

○ (green string)

TAKE HOME ACTIVITY • Have your child measure different objects around the
house using a paper clip measuring tool.

FOR MORE PRACTICE:
Standards Practice Book, pp. P179–P180

Problem Solving • Measure and Compare

Essential Question How can acting it out help you solve measurement problems?

The blue ribbon is about 4 ⬭ long. The red ribbon is 1 ⬭ long. The green ribbon is 2 ⬭ longer than red ribbon. Measure and draw the ribbons in order from **shortest** to **longest**.

🔑 Unlock the Problem

What do I need to find?

order the ribbons from

__shortest__ to

__longest__

What information do I need to use?

__Measure__ the ribbons using paper clips.

Show how to solve the problem.

HOME CONNECTION • Have your child act out a measurement problem by finding the lengths of 3 objects and order them from shortest to longest.

Try Another Problem

Zack has 3 ribbons. The yellow ribbon is about 4 ⬭ long. The orange ribbon is 3 ⬭ shorter than the yellow ribbon. The blue ribbon is 2 ⬭ longer than the yellow ribbon.

Measure and draw the ribbons in order from **longest** to **shortest**.

1.

about ____ ⬭

2.

about ____ ⬭

3.

about ____ ⬭

Math Talk
How many paper clips shorter is the orange ribbon than the blue ribbon? **Explain**.

MATHEMATICAL PRACTICES

Share and Show Math Board

Solve. Draw or write to explain.

✓4. Lisa measures her shoe to be about 5 ⬭ long. Measure and draw an object that is 3 ⬭ shorter than her shoe. Measure and draw an object that is 2 ⬭ longer than her shoe.

5. **H.O.T.** Noah measures a marker to be about 4 ⬭ long and a pencil to be about 6 ⬭ long. Draw an object that is 1 ⬭ longer than the marker and 1 ⬭ shorter than the pencil.

TAKE HOME ACTIVITY • Have your child explain how he or she solved Exercise 4.

FOR MORE PRACTICE:
Standards Practice Book, pp. P181–P182

Name _____

✓ **Mid-Chapter Checkpoint**

Concepts and Skills

Draw three crayons in order from **shortest** to **longest**.

1.

shortest	|
	|
longest	|

Use 🟥 to measure.

2.

about _____ 🟥

3. Kiley measures a package with her paper clip measuring tool. About how long is the package?

- ○ about 1 📎
- ○ about 5 📎
- ○ about 10 📎
- ○ about 20 📎

Name _____

Time to the Hour

Essential Question How do you tell time to the hour on a clock that has only an hour hand?

Listen and Draw REAL WORLD

Start at 1.
Write the missing numbers.

Start

| 1 | 2 | | 4 | 5 | 6 | 7 | 8 | | 10 | 11 | 12 |

11 [ ] 1 **Start**

10   2

9   •   3

8   4

7   [ ]   5
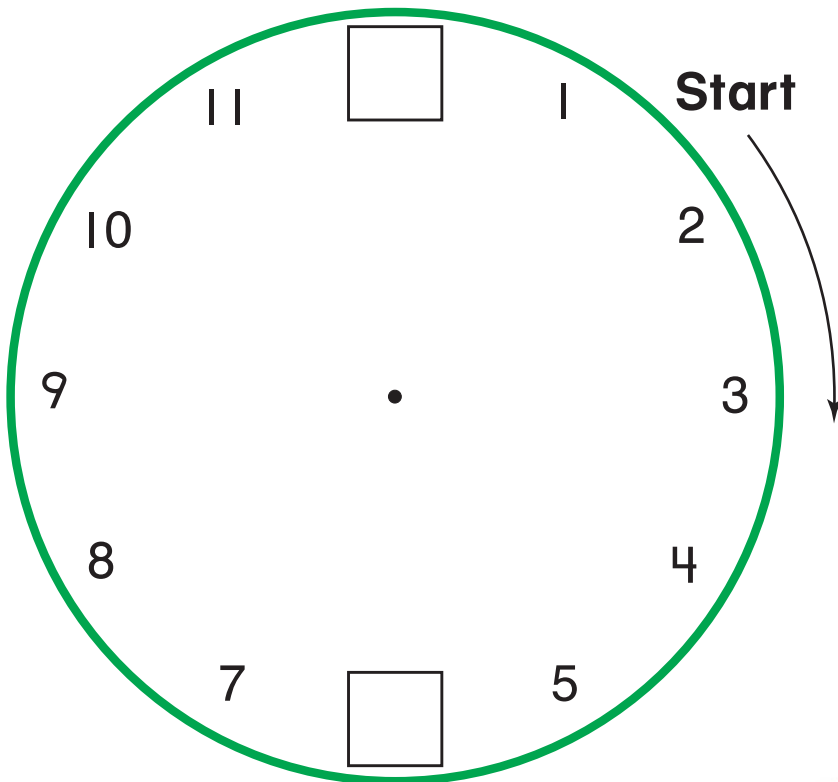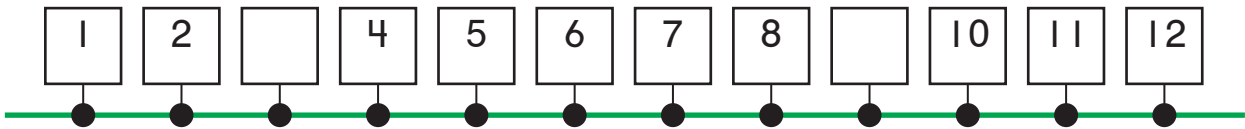
Math Talk
How are a clock face and ordering numbers alike? **Explain.**
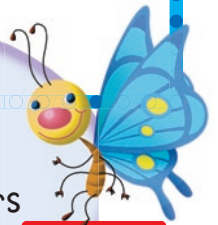
MATHEMATICAL PRACTICES

HOME CONNECTION • A clock face with only an hour hand can make it easier for your child to learn to tell time.

Model and Draw

What does this clock show?
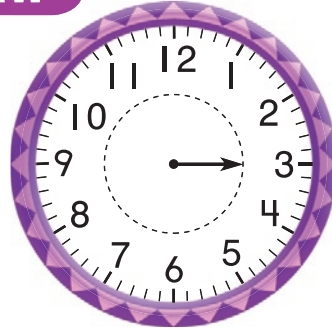
The **hour hand** points to the 3.
It is 3 o'clock.

Say three o'clock.

Write 3:00 .

Share and Show

Look at where the hour hand points.
Write the time.

1.

_____
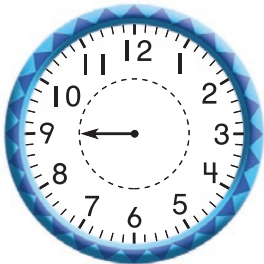
2.

_____
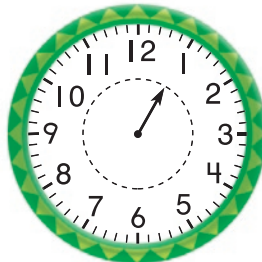
3.
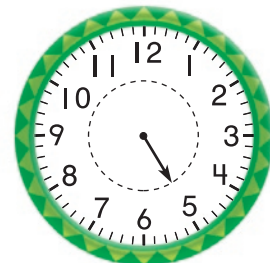
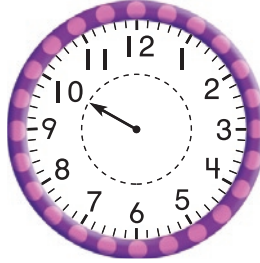_____

4.

_____
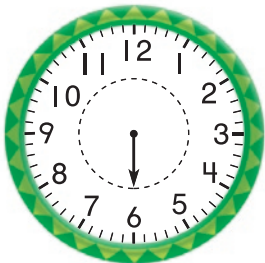
✓ **5.**

_____

✓ **6.**

_____

Name _____
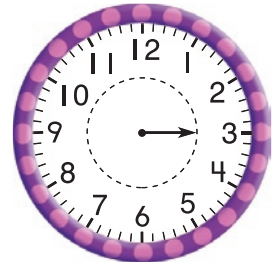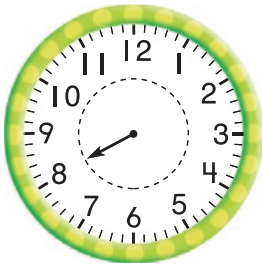
On Your Own

Look at where the hour hand points.
Write the time.

7.

_____

8.

_____

9.

_____
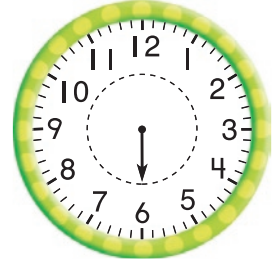
10.

_____
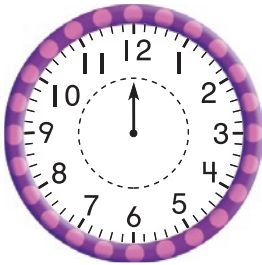
11.

_____

12.

_____

13.

_____

14.

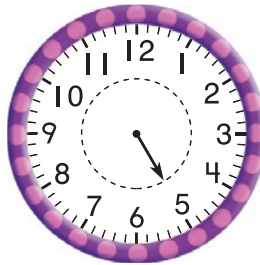_____

15.

_____

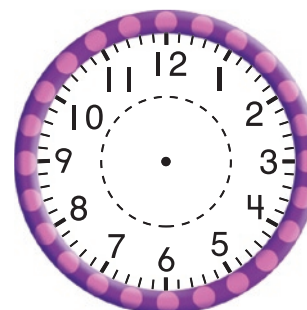# PROBLEM SOLVING   REAL WORLD

Write Math

16. Which time is **not** the same? Circle it.

1:00   1 o'clock

---

17. **H.O.T.** Manny leaves for school at 8 o'clock. Write and draw to show 8 o'clock.

_____

18. Test Prep

Look at the hour hand. What is the time?

- ○ 12:00
- ○   2:00
- ○ 1 o'clock
- ○ 3 o'clock

TAKE HOME ACTIVITY • Have your child describe what he or she did in this lesson.

FOR MORE PRACTICE:
Standards Practice Book, pp. P183–P184

Time to the Half Hour

Essential Question How do you tell time to
the half hour on a clock that has only an hour hand?

Listen and Draw

Circle **4:00**, **5:00**, or **between 4:00 and 5:00**
to describe the time shown on the clock.

4:00

between 4:00 and 5:00

5:00

4:00

between 4:00 and 5:00

5:00

4:00

between 4:00 and 5:00

5:00

Math Talk
Use **before** and
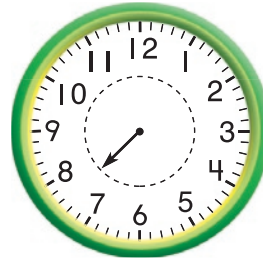**after** to **describe**
the time shown on
the middle clock.

MATHEMATICAL PRACTICES

FOR THE TEACHER • Have children look at the
hour hand on each clock to decide which choice
best describes the time shown.

As an **hour** passes, the hour hand moves from one number to the next number.

The hour hand is halfway between the 7 and the 8.

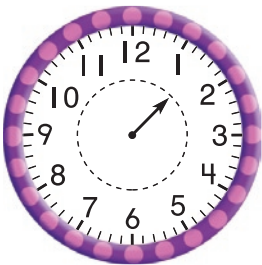When a **half hour** has passed, the hour hand points halfway between two numbers.
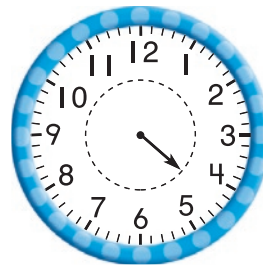
half past 7:00

Share and Show

Math Board
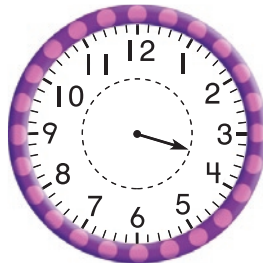
Look at where the hour hand points. Write the time.

1.

_____

_ _ _ _ _ _ _ _ _ _ _ _

_____

2.

_____

_ _ _ _ _ _ _ _ _ _ _ _

_____

✓ 3.

_____

_ _ _ _ _ _ _ _ _ _ _ _

_____

✓ 4.

_____

_ _ _ _ _ _ _ _ _ _ _ _

_____

Name _____

On Your Own

Look at where the hour hand points.
Write the time.

5.

_____
_ _ _ _ _ _ _ _ _ _ _ _
_____

6.

_____
_ _ _ _ _ _ _ _ _ _ _ _
_____
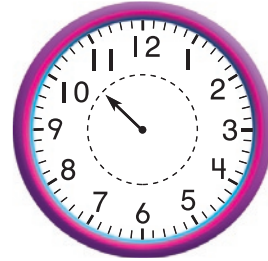
7.

_____
_ _ _ _ _ _ _ _ _ _ _ _
_____

8.

_____
_ _ _ _ _ _ _ _ _ _ _ _
_____
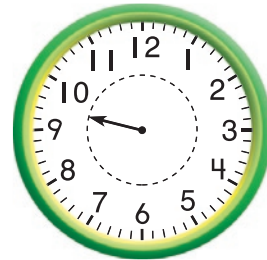
9.

_____
_ _ _ _ _ _ _ _ _ _ _ _
_____

10.

_____
_ _ _ _ _ _ _ _ _ _ _ _
_____

PROBLEM SOLVING REAL WORLD

Write Math
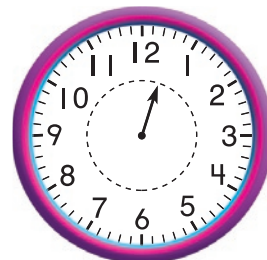
11. Tim plays soccer at half past 9:00. He eats lunch at half past 1:00. He sees a movie at half past 2:00.
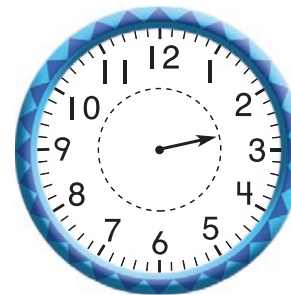
Look at the clock.
Write what Tim does.

_____

_ _

Tim _____ .

12. **H.O.T.** Tyra has a piano lesson at 5:00. The lesson ends at half past 5:00. How much time is Tyra at her lesson? Circle your answer.

half hour

hour

13. Test Prep
Look at the hour hand. What is the time?

○ half past 5:00
○ 5:00
○ half past 4:00
○ 4:00

TAKE HOME ACTIVITY • Say a time, such as half past 10:00.
Ask your child to describe where the hour hand points at this time.

FOR MORE PRACTICE:
Standards Practice Book, pp. P185–P186

Name _____

Tell Time to the Hour and Half Hour

Essential Question How are the minute hand and hour hand different for time to the hour and time to the half hour?

Listen and Draw REAL WORLD

Each clock has an hour hand and a minute hand.
Use what you know about the hour hand
to write the missing numbers.
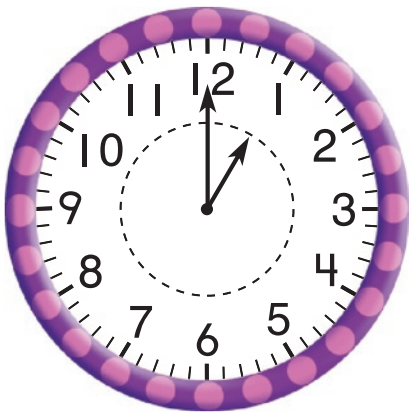
It is 1:00.

The hour hand points to the _____.
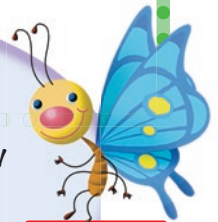
The minute hand points
to the _____.
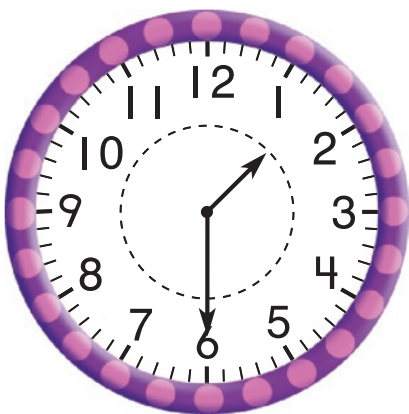
It is half past 1:00.

The hour hand points between
the _____ and the _____.

The minute hand points to the _____.

Math Talk

Look at the top clock. **Explain** how you know which is the minute hand.

MATHEMATICAL PRACTICES

HOME CONNECTION • While children may easily read time on a digital clock, learning to tell time on an analog clock helps to develop important concepts of time.

Chapter 9

An hour has 60 **minutes**.
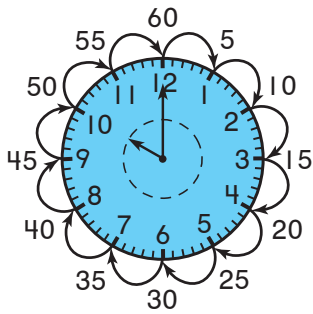
The clocks show 10:00.

A half hour has 30 minutes.
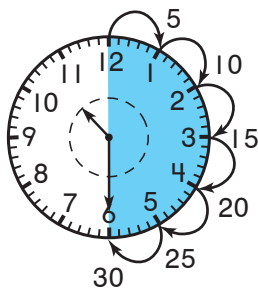
The clocks show half past 10:00. The **minute hand** has moved from the 12 to the 6.

30 minutes after 10:00

Share and Show Math Board

Write the time.

1.

2.

3.

On Your Own

Write the time.

4.

5.

6.

7.

8.

9.

H.O.T. Circle your answer.

10. Sara goes to the park when both the hour hand and the minute hand point to the 12. What time does Sara go to the park?

1:00   12:00   12:30

11. Mel goes to the park at 3 o'clock. He stays for 2 hours. What time does Mel leave the park?

1 o'clock   3 o'clock   5 o'clock

PROBLEM SOLVING REAL WORLD

Write Math

Solve.

12. Matt wakes up at 6 o'clock. Linda wakes up 30 minutes later. Draw to show what time Linda wakes up.
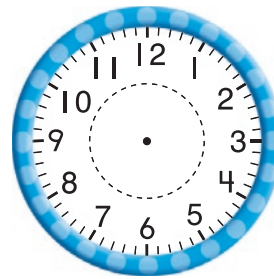
13. David left school at 3:30. Circle the clock that shows 3:30.
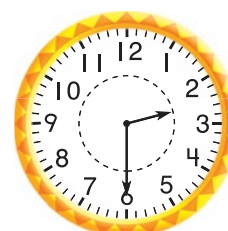
14. H.O.T. The hour hand points halfway between the 2 and 3. Draw the hour hand and the minute hand. Write the time.
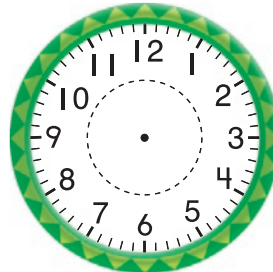
15. Test Prep What time is it?

○ 6:30

○ 7:30

○ 8:00

○ 8:30

TAKE HOME ACTIVITY • At times on the half hour, have your child show you the minute hand and the hour hand on a clock and tell what time it is.

400 four hundred

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FOR MORE PRACTICE:
Standards Practice Book, pp. P187–P188

Name _____

Practice Time to the Hour and Half Hour

Essential Question How do you know whether to draw and write time to the hour or half hour?

Listen REAL WORLD

Circle the clock that matches the problem.
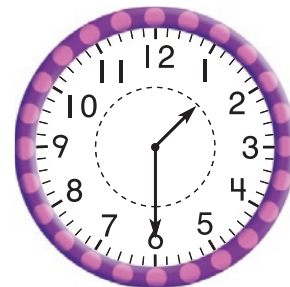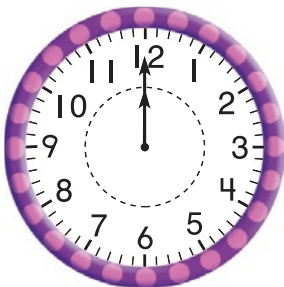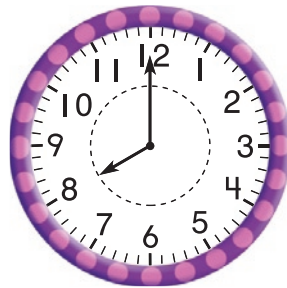
Math Talk
Describe how you know which clock shows 1:30.

MATHEMATICAL PRACTICES

FOR THE TEACHER • Read the following problems. Barbara goes to the store at 8:00. Circle the clock that shows 8:00. Children use the top work space to solve. Then have children solve this problem: Barbara takes Ria for a walk at 1:30. Circle the clock that shows 1:30.

Chapter 9

Model and Draw

Where should you draw the
minute hand to show the time?

9:00

9:30

Share and Show

Math Board
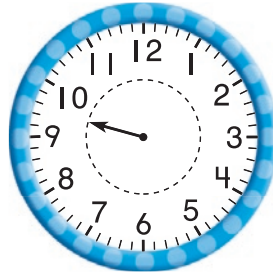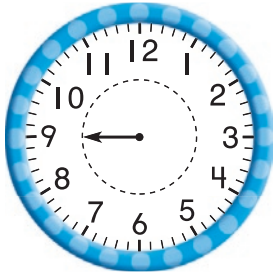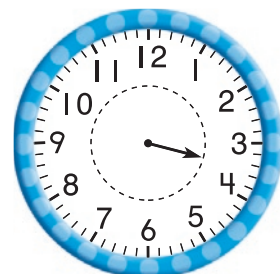
Use the hour hand to write the time.
Draw the minute hand.

1.

2.

3.

4.

5.

6.
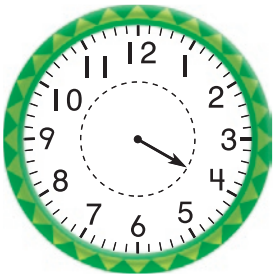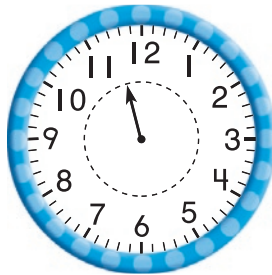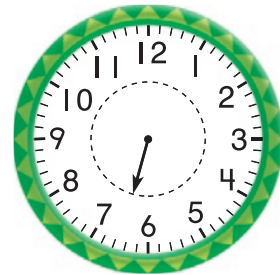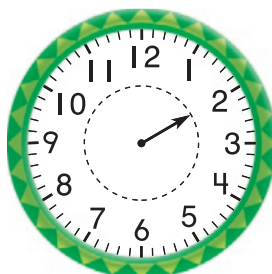
On Your Own

Use the hour hand to write the time.
Draw the minute hand.

7.

8.

9.

10.

11.

12.

13. Explain What is the error? Zoey tried to show 6:00. Explain how to change the clock to show 6:00.

_____

_____

_____

_____
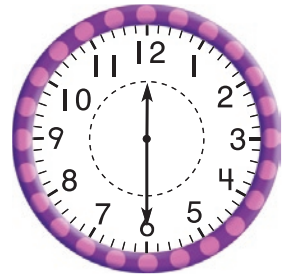
PROBLEM SOLVING REAL WORLD

Write Math

Solve.

14. Vince looks at the clock on the wall. It shows 4:00. He goes to a baseball game 30 minutes later. Draw to show what time Vince goes to a baseball game.
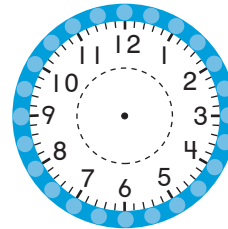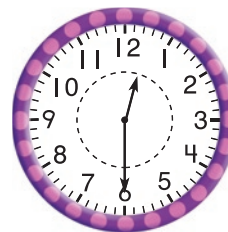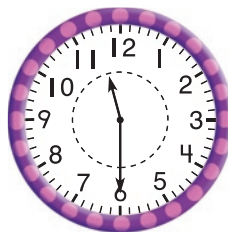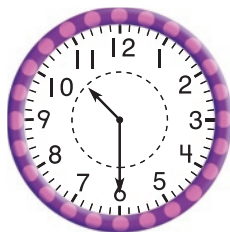
15. Missy watched a game for an hour. Write how many minutes Missy watched a game.

_____ minutes

16. **H.O.T.** Brandon has lunch at 12:00. Then he has math class 30 minutes later. Then he has art class 30 minutes after math class. Draw what time Brandon has art class.
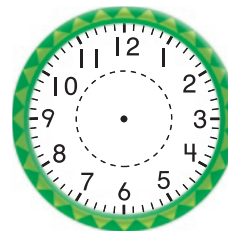
17. **Test Prep** Which clock shows 11:30?

○   ○   ○   ○

TAKE HOME ACTIVITY • Show your child the time on a clock. Ask him or her what time it will be in 30 minutes.

FOR MORE PRACTICE:
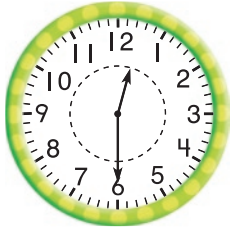Standards Practice Book, pp. P189–P190

✓ 🏴 Chapter 9 Review/Test

Vocabulary

Circle the clock that shows time to the **half hour**. **(p. 394)**
Underline the clock that shows time to the **hour**. **(p. 394)**

1.

Concepts and Skills

Use 🟥 to measure.

2.

about _____ 🟥

Draw three crayons in order from **longest**
to **shortest**.

3.

longest	
shortest	

4. Mike measures a box with ⊂⊃.
About how long is the box?

about 3 ⊂⊃   about 5 ⊂⊃   about 10 ⊂⊃   about 20 ⊂⊃
○   ○   ○   ○

5. Karen measures the crayon
with ■. About how long is
the crayon?

about 1 ■   about 3 ■   about 5 ■   about 7 ■
○   ○   ○   ○

6. A red line is longer than a purple line.
The purple line is longer than a yellow line.
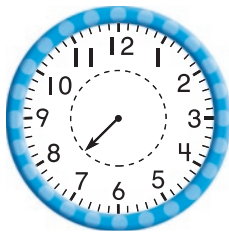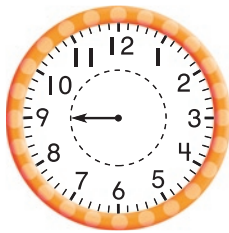Which is correct?

○

○

○

○

7. What is the time?

- ○ 7:00
- ○ half past 7:00
- ○ 8:00
- ○ half past 7:00

8. Look at the hour hand. What time is it?

- ○ 7:00
- ○ 8:00
- ○ 9 o'clock
- ○ 10 o'clock

9. The red line is about 4 ⬭ long. The blue line is
1 ⬭ longer than the red line. The green line is
2 ⬭ shorter than the red line. Which is correct?

- ○
- ○
- ○
- ○

Performance Task

Choose three objects to measure.

- Measure the length of each object with ■.
- Order the objects from shortest to longest.

Write each measurement.
Use pictures, words, or numbers to
show how you ordered the lengths
of the objects.

Show your work.