Objective

Explore the concept of height using nonstandard units.

Common Core State Standards

■ **K.MD.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

Measurement and Data

Nonstandard Measurement of Height

Children may be familiar with height. They may have been measuring their growth on a wall at home, comparing their height to that of a family member, or waiting to be tall enough for a certain activity. In this lesson, children will learn to measure height in nonstandard units, which lays a foundation for later being able to use more abstract standard units of measure, such as inches and feet.

Try It! *Perform the Try It! activity on the next page.*

Talk About It

Discuss the Try It! activity.

■ **Ask:** *What are some things that people measure for height?* Help children think of objects, such as buildings, trees, and so on.

■ **Say:** *Explain how you find out how tall something is by using Link 'N' Learn® Links.*

Solve It

With children, reread the problem. Have children draw a picture showing how Jordan could measure the height of the jar with links.

More Ideas

For other ways to teach about nonstandard measurements of height—

■ Have children work in pairs. Each child will trace his or her partner on a large piece of paper. Then children will attach their outlines to the wall and measure the height using Link 'N' Learn Links.

■ Have children work in pairs to play a guessing game. Children choose a classroom object and each child guesses the object's height in Link 'N' Learn Links (or Snap Cubes®). Then children measure the object's height with links (or cubes) to see whose guess was closest.

Formative Assessment

Have children try the following problem.

How many links tall is the milk carton?

Try It!   10 minutes | Pairs

Here is a problem demonstrating how to use nonstandard units to measure height.

In Jordan's classroom, there is a jar in which children put paintbrushes when they are not using them. Jordan's teacher asks the class to find out how tall the jar is. She says that they will measure the jar using Link 'N' Learn® Links. How can Jordan find out the height of the jar?

Introduce the problem. Tell children that they will use links to find the height of classroom objects. Explain that height tells how tall something is. Demonstrate for children how to make a chain of links that is the height of a classroom object, such as the leg of a chair. Then have children do the activity to solve the problem. Distribute links to children.

Materials
• Link 'N' Learn® Links (50 per pair)

1. Ask children to choose an object in the classroom and estimate its height. Encourage them to make a chain that is the same height as the object.
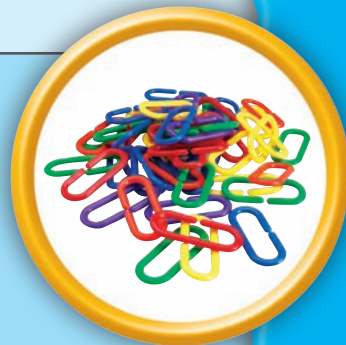

2. Now have children check their chains against the object they are measuring. For example, if children choose a table to measure, **say:** *Hold your chain beside the table to see if they are the same height.* Children may have to add or take away links to make their chains the same height as the objects they are measuring.
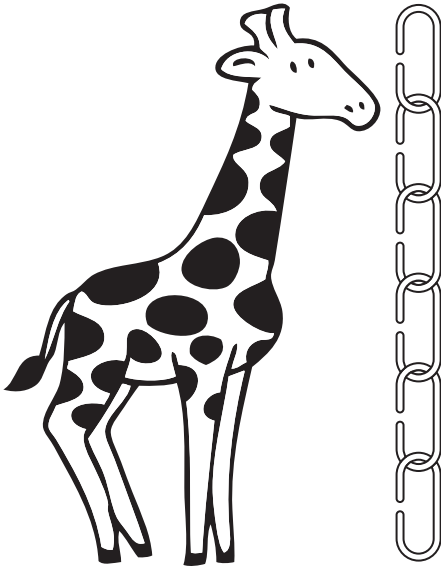

3. Have children make sure their chains match the height of the object. Then ask children to share their final measurements with the class.

⚠ Look Out!

Some children may choose objects to measure whose height cannot be expressed with an even number of links. If children are confused by this, tell them that some items may be "almost" or "close to" a certain number of links.
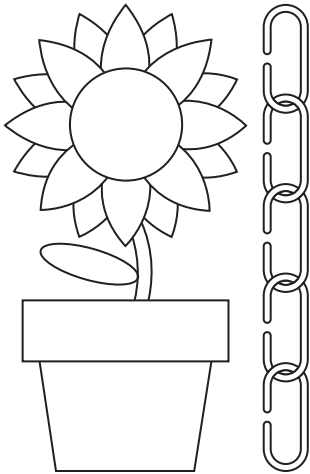
1.

6

2.

5

Directions

1. How many links tall is the toy giraffe?   **2.** How many links tall is the flower?

Hands-On Standards, Common Core Edition
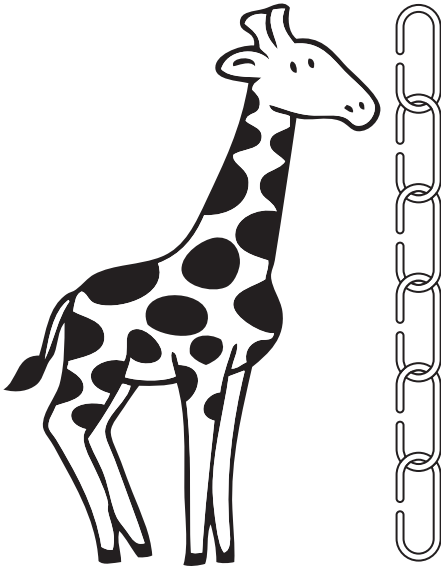
© ETA hand2mind™

Answer Key

Check children's work.

Challenge

Draw a picture of a tall building. Use links to measure how tall it is. Write how many links tall your building is.

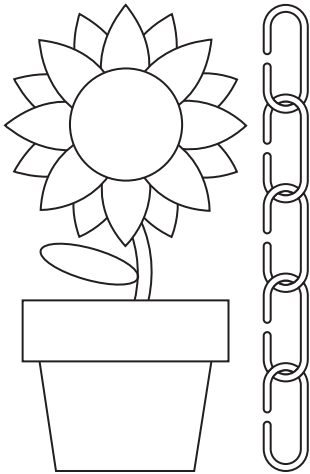Name _____

1.

_____

2.

_____

Directions

1. How many links tall is the toy giraffe?   **2.** How many links tall is the flower?

Name _____

Challenge

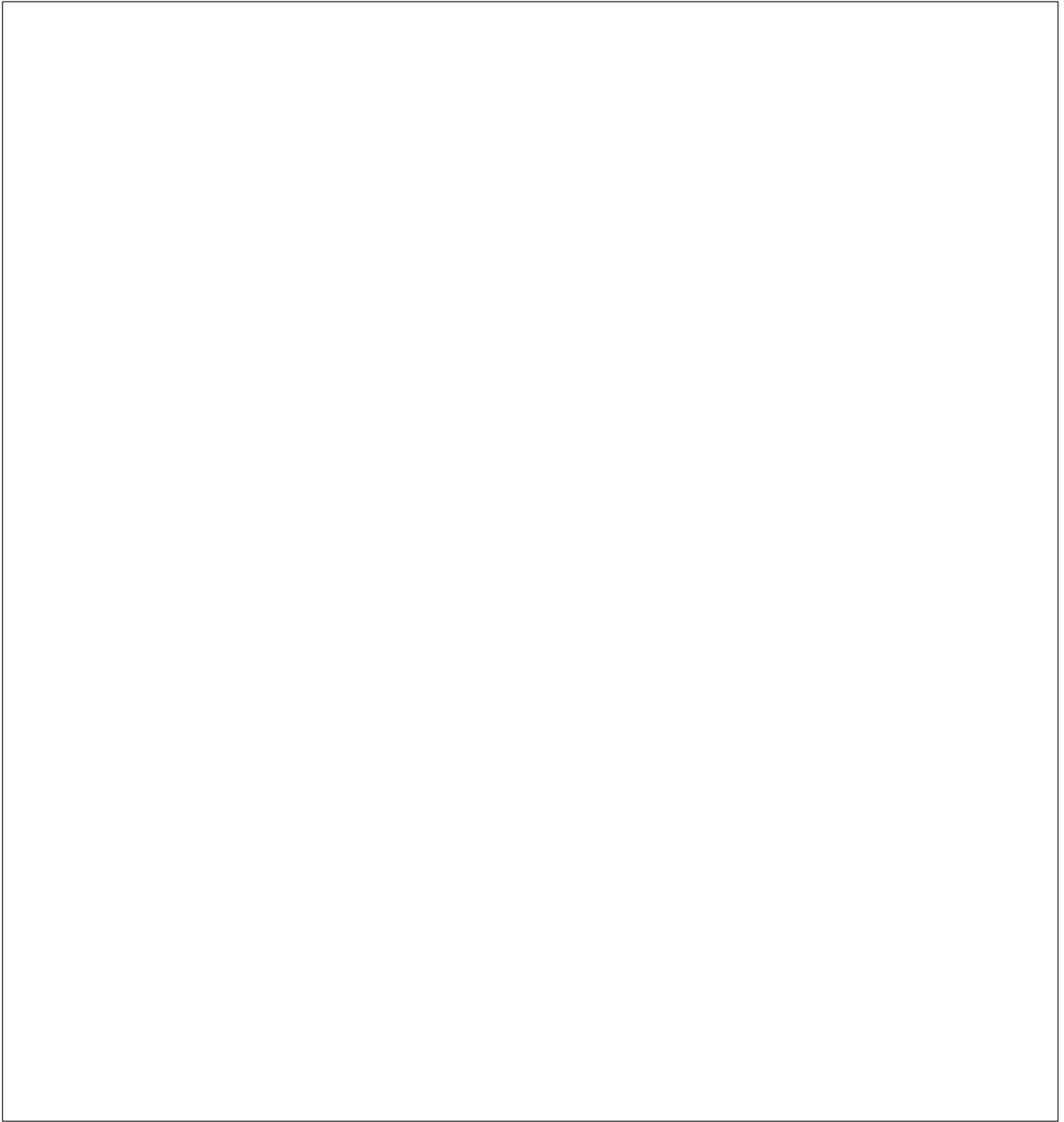Draw a picture of a tall building. Use links to measure how tall it is. Write how many links tall your building is.