BE A MATH NINJA

ACTIVITY INSTRUCTIONS

Lesson: Putting It All Together!

Tiered For: Grade 2 (or additional review/support for Grades 3–4)

Objective: Students will be able to measure the length of objects using rulers and then use those measurements to solve word problems.

Materials: Student Worksheet on next page, rulers marked in inches, tape measure, and yardstick for demonstration.

1. Show the class a small common classroom object, such as a whiteboard eraser, pencil, or crayon. Ask whether it would be easiest to measure the object with a ruler, yardstick, or tape measure (a ruler is most appropriate for small objects).

2. Demonstrate how to measure the object with a ruler. Indicate that a ruler has metric and customary sides and tell the class that you will be using the customary side because you want to measure in inches. Point out that the end of the object should be lined up with the hash mark for zero, not necessarily the end of the ruler.

3. Tell the class that measurements of multiple objects lined up can be added—e.g., three crayons, each measuring 4 inches, lined up end to end would have a total length of 12 inches (4 + 4 + 4).

4. Distribute **Student Worksheet** and rulers. The worksheet can be completed individually, in pairs, or as a class.

5. Review answers as a class.

Answer Key: 1) 1" and 2"; **2)** 18 bricks; **3)** 9 bricks; **4)** 3 ninjas; **5)** 18"
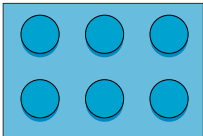
Putting It All Together!

Lloyd and his five companions are on the hunt for Garmadon! To reach him, they must cross a dangerous canyon that is 18 inches long. If they work together, they can build a bridge to carry themselves safely over the canyon. Help them complete their mission by answering the following:
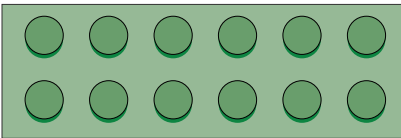
.5" ⊢————⊣

Note: To build a bridge, bricks must be placed side by side and add up to 18 inches in length. Don't worry, a Master Builder is on the way to connect the bridge parts with extra bricks!

1 Lloyd and his companions have bricks to build a bridge. Use your ruler to measure the length of each brick.

|←----- ? -----→|

A 2 x 3 brick is

_____ long.

|←--------------- ? ---------------→ |

A 2 x 6 brick is

_____ long.

2 What is the least amount of 2 x 3 bricks needed to cross the canyon? To form the base of this bridge, the bricks don't need to overlap.

_____

3 How many 2 x 6 bricks are needed?

_____

4 Lloyd is worried that if all six ninjas build the bridge, no one will be left to guard NINJAGO® City from Garmadon's evil army. Each ninja has two 2 x 6 bricks and two 2 x 3 bricks. How many ninjas would have to take their bricks to the canyon for there to be enough bricks to build the bridge?

_____

5 What is the total length of the unused bricks when laid side by side?

_____

Learn From Lloyd

Try drawing a picture of the bricks next to one another and then measure them!