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LESSON 12 Meaning of Multiplication

Multiplication is like repeated addition. You can use an **array** or other model to show multiplication.

Cody, Ryan, and Hiro each ate 5 crackers. How many crackers did they eat in all?

This array shows 3 rows of 5 crackers.



$$5 + 5 + 5 = 3 \text{ rows of } 5$$

$$3 \times 5 = 15$$

They ate 15 crackers in all.

Factors are the numbers you multiply to get a product.

$$\begin{array}{r} 2 \leftarrow \text{Factor} \\ \times 7 \leftarrow \text{Factor} \\ \hline 14 \leftarrow \text{Product} \end{array}$$

Read each problem. Circle the letter of the best answer.

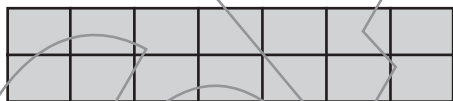
- 1 Which number sentence shows the model below?



- A $3 \times 5 = \square$ C $4 \times 5 = \square$
 B $3 \times 6 = \square$ D $4 \times 6 = \square$

The model shows 3 rows of 6 shapes each. This is the same as $3 \times 6 = \square$. The correct answer is B.

- 2 Which multiplication expression is modeled below?



- A 1×7 C 2×7
 B 1×8 D 2×8

- 3 Sela bought 6 packs of gum. Each pack had 5 pieces of gum. Which model shows the total pieces of gum Sela bought?

- A C
 B D

Read each problem. Write your answers.

4 Nick built 5 toy wagons. He put 4 wheels on each wagon.

A Draw a picture to model the total number of wheels Nick put on these wagons.

B Write a number sentence to show the total number of wheels Nick put on these wagons.

Answer: _____

5 Mary, Julia, and Vicki each collected 8 half-dollar coins.

A Draw a picture to model the total number of half-dollar coins Mary, Julia, and Vicki have.

B How many half-dollar coins are there in all?

Answer: _____

C Explain why your answer is correct.
