Name _____

Additional
Practice 4-2
**Use Models to
Multiply 2-Digit
Numbers by
Multiples of 10**

Another Look!

You can use arrays, area models, or place-value blocks to help find the product of 20 × 14.

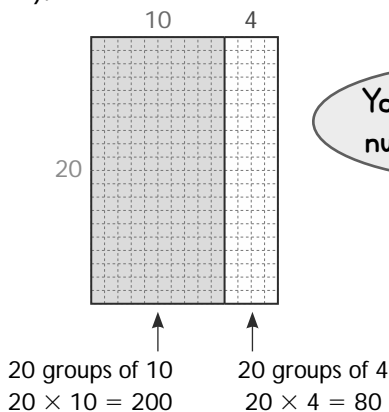20 × 14 means 20 groups of 14, or (20 groups of 10) + (20 groups of 4).

Add the partial products from the model.

20 groups of 10 = 200
20 groups of 4 = 80

200 + 80 = 280

So, 20 × 14 = 280.

10   4

20

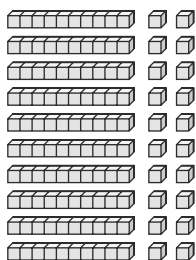You can break apart numbers to multiply.

20 groups of 10   20 groups of 4
20 × 10 = 200   20 × 4 = 80

For **1–2**, use the array to find each product.
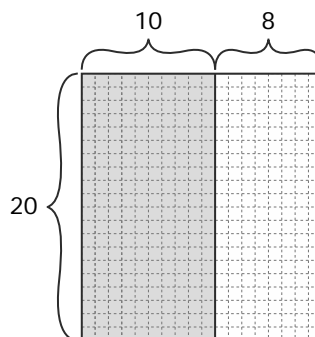
1. 10 × 12

10 groups of 10 = _____
10 groups of 2 = _____
_____ + _____ = _____
So, 10 × 12 = _____ .

2. 20 × 18

10   8

20

20 groups of 10 = _____
20 groups of 8 = _____
_____ + _____ = _____
So, 20 × 18 = _____ .

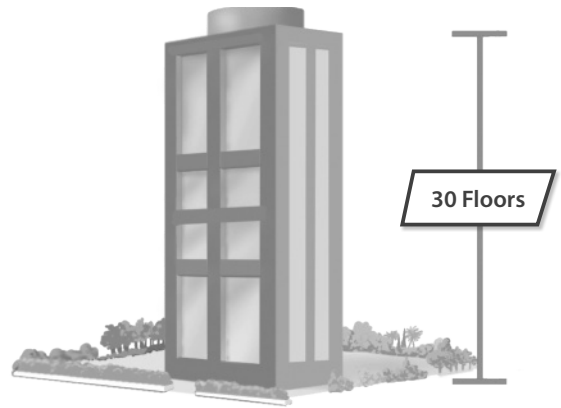For **3–6**, find each product. Draw an array or an area model to help.

3. 50 × 15   **4.** 40 × 22   **5.** 30 × 39   **6.** 60 × 21

7. The height of each story of an apartment building is measured from the bottom of one floor to the bottom of the next floor. Each story has a height of 18 feet. How tall is the building?

30 Floors

8. Make Sense and Persevere Marta exercises 30 minutes each day. Greg exercises 40 minutes each day. How many more minutes does Greg exercise than Marta in a month that has 31 days?

9. A dentist orders 15 boxes of floss and 20 boxes of toothbrushes each month. Floss is sold 70 to a box and toothbrushes are sold 50 to a box. How many items does the dentist order each month?

10. Mrs. Harrigan ordered 30 boxes of glasses for her restaurant. Each box holds 16 glasses. She also ordered 30 boxes of plates. There are 25 plates in each box. How many glasses and plates did Mrs. Harrigan order altogether?

11. Higher Order Thinking Without multiplying, is the product of 45×10 or 50×10 greater? Explain.

Assessment Practice

12. Miranda says 30×26 is greater than 20×36. Is she correct? Draw a model to explain if Miranda is correct. 4.NBT.2.5

You can draw an area model or an array to represent the problem.