Illustrative Mathematics

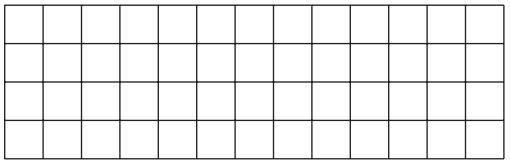
Grade 4 Unit 6
Lesson 6

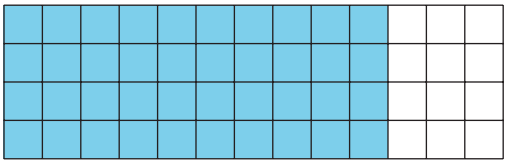
Unit 6 Lesson 6: Multiply Two-digit Numbers and One-digit Numbers

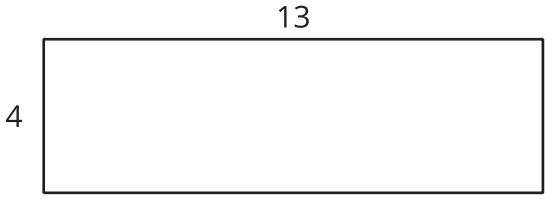
WU Notice and Wonder: With and Without a Grid (Warm up)

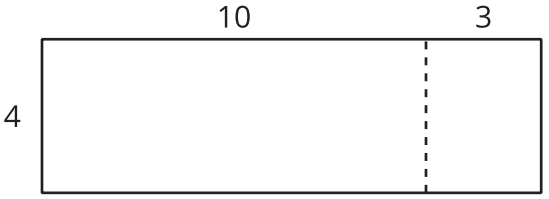
Student Task Statement

What do you notice? What do you wonder?





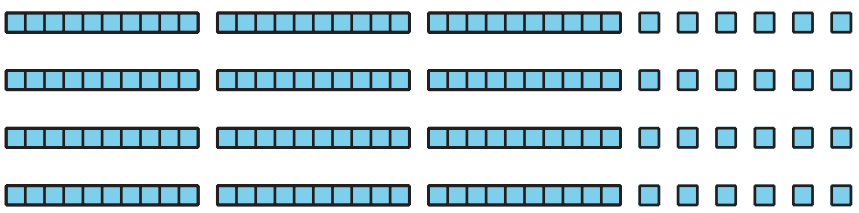




1 Tyler's Diagrams

Student Task Statement

1. To find the value of 4×36, Tyler uses a base-ten diagram, as shown here.



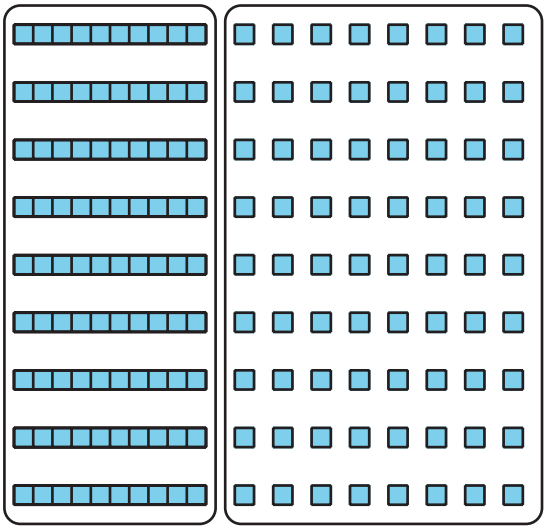
   a. Where is the 36 in Tyler's diagram?

b. Where is the 4 in Tyler's diagram?

c. What is the value of 4×36?

2. Here is a diagram Tyler made to find the value of 9×18.

   Explain or show how his diagram helps him find the value of 9×18.



2 Two Kinds of Diagrams

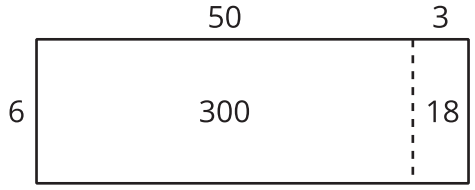
Student Task Statement

1. Priya drew a base-ten diagram to multiply 6×53. She said it shows that the product can be found by adding 300 and 18.

   a. Where do you see 6 and 53 in her diagram?

   b. Where do you see 300 and 18 in Priya's diagram? What do they represent?

2. Han drew this diagram to multiply 6×53:



   Where do you see 300 and 18 in his diagram? What do they represent?

3. Which diagram do you prefer for multiplying 6×53: Han's way or Priya's way? Explain your reasoning.
4. Find the value of 6×53.
5. Draw a diagram to represent each multiplication expression. Then, find the value of each product.

    a. 6×48

    b. 9×67

Images for Activity Synthesis