Number

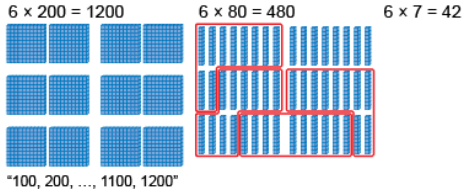
Activity 23 Assessment

Exploring Strategies for Multiplying

Conceptual Meaning of Multiplication and Division with Larger Numbers

Models multiplication and division situations concretely and pictorially

6 × 287 = ?

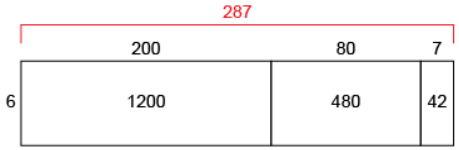


1200 + 480 + 42 = 1722

"I traded groups of 10 rods for a flat."

Models multiplication and division situations using an open array

6 × 287 = ?



"I can use an open array to help me multiply."

Uses place value to multiply and divide natural numbers by 10, 100, and 1000

34 × 200 = 34 × 2 × 100
= 68 × 100
= 6800

"I used the associative property to make friendly numbers."

Observations/Documentation

Number

Activity 23 Assessment

Exploring Strategies for Multiplying

Conceptual Meaning of Multiplication and Division with Larger Numbers (cont'd)

Decomposes numbers and uses standard algorithm to multiply and divide	Estimates to determine if answer to multiplication or division problem is reasonable	Creates and solves multiplication and division problems flexibly using a variety of strategies
6 × 287 = ? $\begin{array}{r} {\scriptstyle 5\ 4}\\ 287\\ \times\quad 6\\ \hline 1722 \end{array}$ "I used the standard algorithm to multiply the numbers."	6 × 287 = 1722 287 is close to 300. 6 × 300 = 1800 "1800 is close to the answer I calculate, 1722. So, my answer is reasonable."	123 ÷ 6 =? "I counted 123 photographs to put in an album. Each page can hold 6 photographs. How many pages will I need?" $\begin{array}{r} 20\ \text{R3}\\ 6\overline{)123}\\ \underline{120}\\ 3 \end{array}$ "I round up to 21 pages to be sure all photos will fit."

Observations/Documentation