## Multiplication and Division Facts Using Area Models



Manipulative: Use Color Tiles to form rectangles for multiplication facts. Students should sketch the rectangles and label the factors (width and length), and find the area (product)

Facts Cards: Make several pages of $100 \times 100$ rectangular grid cards. See District Web link "Multiplication and Division Facts Using Area Models Grid Cards". Students begin in the upper right corner of the grid sketching and shading a rectangle for given multiplication facts and labeling the width and the length. The total squares in the rectangle (product) should be written on the back of the card.

Note: Using an area model, teacher and students should identify rows and columns. When listing facts, always give number of rows first and number of columns second.

Ideas for using facts cards:
$>$ Use as flash cards where students keep those they struggle with to rehearse daily.
$>\quad$ Find commutative fact pairs such as $2 \times 3$ and $3 \times 2$.
> Division: Teach students to use the missing factor by asking, "How many $\qquad$ in $\qquad$ . In pairs, a student holds the card covering one factor, looking at the product on the back of the card, and asks a question such as "How many 3's are in 6?"
$>$ Division: Find related fact pairs such as "How many 2's in 6? How many 3's in 6?
> Sort the cards by product group all factors that have the same product.

## Example Fact Card

3


4


