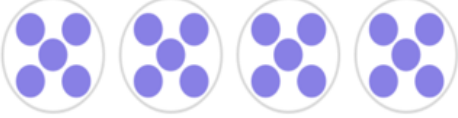

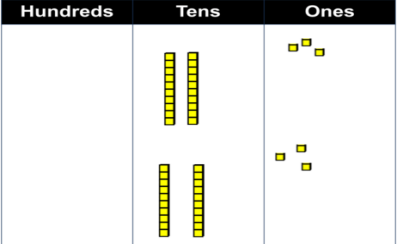
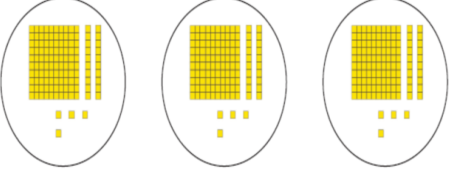
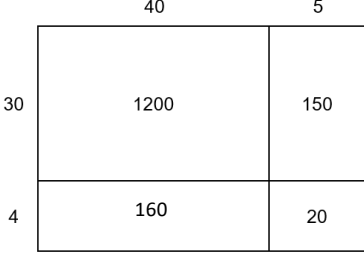


Multiplication Strategy Examples

Concrete: Direct Modeling Examples	Representational: Invented Strategies Examples	Abstract: Standard Algorithm(s) Examples
<p>Problem: Suzanne has 4 bags of cookies. Each bag has 5 cookies. How many cookies does she have left?</p> <p>Solution Path: Equal groups</p> 	<p>Problem: $8 \times 6 = ?$ $(4 \times 6) + (4 \times 6) = 48$</p> <p>Solution Path: Derived Fact Strategies: Doubling</p> $(4 \times 6) + (4 \times 6) =$ $24 + 24 = 48$	<p>Problem: $13 \times 8 = ?$</p> <p>Solution Path: Partial Product Algorithm</p> $\begin{array}{r} 13 \\ \times 8 \\ \hline 24 \\ + 80 \\ \hline 104 \end{array}$
<p>Problem: $3 \times 5 = ?$ $3 \times 5 = 15$</p> <p>Solution Path: Array Model</p> 	<p>Problem: $6 \times 7 = 42$</p> <p>Solution Path: Derived Fact Strategies: Near a Square</p> $6 \times 6 = 36$ $1 \times 6 = 6$ $36 + 6 = 42$	<p>Problem: $15 \times 7 = ?$</p> <p>Solution Path: Partial Product Algorithm</p> $10 \times 7 = 70$ $5 \times 7 = 35$ $70 + 35 = 105$
<p>Problem: $23 \times 2 = \underline{\quad}$</p> <p>Solution Path: Base-Ten Blocks</p> 	<p>Problem: $38 \times 9 = ?$</p> <p>Solution Path: Partial Products by Tens and Ones</p> $10 \times 9 = 90$ $10 \times 9 = 90$ $10 \times 9 = 90$ $8 \times 9 = 72$ $90 + 90 + 90 + 72 = 342$	<p>Problem: $32 \times 46 = ?$</p> <p>Solution Path: Partial Product Algorithm</p> $\begin{array}{r} 32 \\ \times 46 \\ \hline 192 \\ + 1280 \\ \hline 1472 \end{array}$
<p>Problem: $124 \times 3 = \underline{\quad}$</p> <p>Solution Path: Base-Ten Blocks</p> 	<p>Problem: $34 \times 45 = ?$</p> <p>Solution Path: Array Model</p>  $1200 + 150 + 160 + 20 = 1530$	<p>Problem: $23 \times 19 = ?$</p> <p>Solution Path: Standard Algorithm</p> $\begin{array}{r} 23 \\ \times 19 \\ \hline 207 \\ + 230 \\ \hline 437 \end{array}$

Multiplication Strategy Examples

