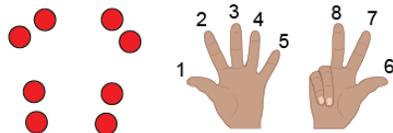
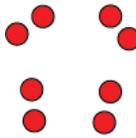
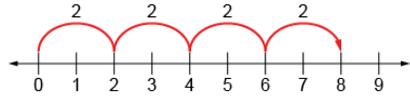
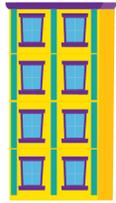
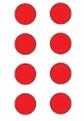


Activity 31 Assessment

Creating and Solving Problems

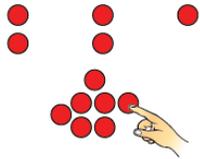
Multiplying 1-Digit Numbers			
<p>Groups objects and counts by 1s</p> 	<p>Groups objects and skip-counts</p>  <p>"2, 4, 6, 8"</p>	<p>Uses repeated addition</p>  <p>"2 + 2 + 2 + 2 = 8."</p>	<p>Models using multiplicative thinking</p>  <p>"4 rows of 2 is 8."</p>
Observations/Documentation			
<p>Understands relationship between operations</p> <p>"I can think of $2 + 2 + 2 + 2 = 8$ as 4 groups of 2."</p> 	<p>Uses multiplication symbol</p> <p>"$4 \times 2 = 8$"</p>	<p>Multiplies fluently (e.g., uses properties of multiplication)</p> <p>"$4 \times 2 = 8$ $2 \times 4 = 8$"</p>	<p>Creates and solves problems involving equal groups</p> <p>$4 \times 2 = 8$</p> <p>"There are 4 bicycles in the shed. How many wheels are there altogether?"</p>
Observations/Documentation			

Activity 31 Assessment

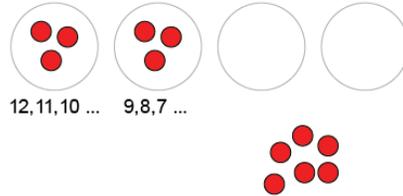
Creating and Solving Problems

Dividing 1-Digit Numbers

Models using equal sharing

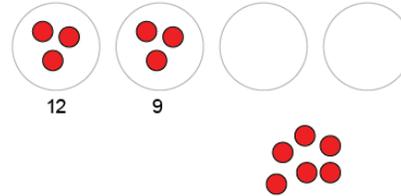


Models using equal grouping, counting by 1s

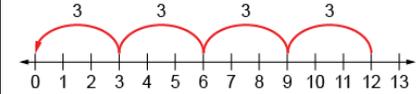


"I know 3 go in each group."

Models using equal grouping, skip-counting backward



Uses repeated subtraction



"4 jumps of 3 backward is the same as $12 - 3 - 3 - 3 - 3 = 0$."

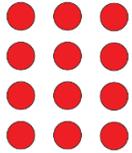
Observations/Documentation

Activity 31 Assessment

Creating and Solving Problems

Dividing 1-Digit Numbers (con't)

Models using multiplicative thinking, and uses division symbol

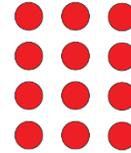


“12 divided into groups of 3 is
4 groups
 $12 \div 3 = 4$.”

Divides fluently

“I know $12 \div 4 = 3$,
so $12 \div 3 = 4$.”

Creates and solves problems involving equal sharing and grouping



“There are 12 wheels
on tricycles in the shed.
How many tricycles are there?”

Understands relationships among operations

“I know $12 - 3 - 3 - 3 - 3 = 0$,
so I also know that $12 \div 3 = 4$.
I also know that $4 \times 3 = 12$ ”

Observations/Documentation