

# Activity 5 Assessment

## Number Relationships and Place Value Consolidation

### Extending Whole Number Understanding

Represents 5-digit numbers on place-value chart (decomposes in one way).

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
	7	1	2	8	3

"71 283 has 7 ten-thousands, 1 thousand, 2 hundreds, 8 tens, and 3 ones."

Represents same number in multiple ways (e.g., words, expanded form, place-value chart).

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
	7	1	2	8	3

"71 238; seventy-one thousand two hundred eighty-three;  $70\ 000 + 1000 + 200 + 80 + 3$ "

Uses relationships among place-value positions to read a number in more than one way.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
	7	1	2	8	3

"7 ten-thousands, 1 thousand, 2 hundreds, 8 ten, and 3 ones can also be 71 thousands, 2 hundreds, and 83 ones."

### Observations/Documentation

# Activity 5 Assessment

## Number Relationships and Place Value Consolidation

### Extending Whole Number Understanding (con't)

Uses place-value to compare numbers.

Ten thousands	Thousands	Hundreds	Tens	Ones
7	1	2	8	3
7	3	1	9	3

“Both numbers have 3 ten-thousands. Since 3 thousands is more than 1 thousand, 73 193 is greater than 71 283.”  
 $73\ 193 > 71\ 283$

Uses place value to compare and order numbers.

**65 218, 56 812, 65 018, 65 208**

“I compared the digits in each place-value position. From least to greatest: 56 812, 65 018, 65 208, 65 218.”

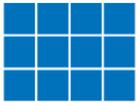
Extends whole number understanding up to and beyond 1 000 000.

“To represent 1 639 587, I have to add 2 columns to the place value chart: one for hundred-thousands and one for millions.”

### Observations/Documentation

# Activity 5 Assessment

## Number Relationships and Place Value Consolidation

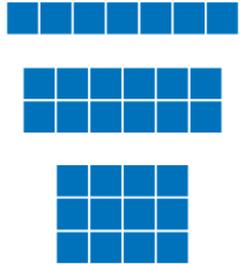
Determining Multiples and Factors			
<p>Uses concrete materials to find multiples.</p>  <p>“To find multiples of 4, I added a row of 4 tiles each time and counted on: 4, 8, 12, ....”</p>	<p>Uses skip-counting or repeated addition.</p> <p>4, 8, 12, 16, 20, ...</p>	<p>Uses familiar basic facts to identify some multiples and factors.</p> <p><math>2 \times 4 = 8</math>  <math>3 \times 4 = 12</math>  <math>10 \times 4 = 40</math></p> <p>“I thought of the multiplication facts for 4 that I know.”</p>	<p>Uses efficient, systematic strategies to determine multiples and identify all factors.</p> <p>“To find factors of 8, I start  <math>8 \div 1 = 8</math>            Factors are 1 and 8.  <math>8 \div 2 = 4</math>            Factors are 2 and 4.  <math>8 \div 3 = X</math>  <math>8 \div 4 = 2</math>            So, 1, 2, 4, and 8 are all factors.”</p>
Observations/Documentation			

# Activity 5 Assessment

## Number Relationships and Place Value Consolidation

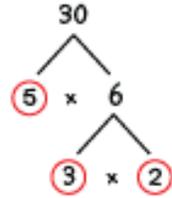
### Determining Multiples and Factors (con't)

Uses concrete materials to identify prime and composite numbers.



"7 is prime because it has only 2 factors, 1 and 7. 12 is composite because it has more than 2 factors: 1 and 12, 2 and 6, and 3 and 4."

Writes a composite number as a product of its prime factors.



$$30 = 2 \times 3 \times 5$$

Identifies common factors and multiples for a pair of numbers.

Multiples of 4: 4, 8, 12, 16, 20, 24, 28  
 Multiples of 6: 6, 12, 18, 24, 30

"Two common multiples are 12 and 24."

Solves problems involving common factors and multiples

"Choir practice is every 5th day.  
 Gymnastics is every 3rd day.  
 That means choir and gymnastics both happen every 15th day."

### Observations/Documentation