

## ALL KINDS OF NUMBERS

### Performance Standard (6A/6D).B

- Count and compare numbers and unit fractions using “greater than” and “less than” notations, represent numbers and unit fractions with manipulatives.
- *Mathematical knowledge*: Count, compare numbers and unit fractions;
- *Strategic knowledge*: Manipulate objects to represent numbers and unit fractions;
- *Explanation*: Explain completely what was done and why it was done.

### Procedures

1. *In order to solve problems using comparison of quantities, ratios, proportions, and percents(6D)*, students should experience sufficient learning opportunities to develop the following:
  - Count with understanding including skip counting from any number by 2’s and 10’s.
  - Extend initial understanding of place value and base 10 number system using multiple models.
  - Describe numeric relationships using comparison notation.
  - Describe parts of a set using  $\frac{1}{2}$ ,  $\frac{1}{3}$ , and  $\frac{1}{4}$ .
  - Represent, order, label and compare unit fractions using concrete materials.
2. Students will skip count from mid-sequence and represent the new number with concrete materials in the first part of this task. These new numbers will be used to record knowledge of comparison notation. In Part 2 students will create a fraction poster using stickers to represent parts of a set and order the resulting unit fractions. Students will explain to the group what they did and why they did it.
3. Part 1 of this assessment must be done in small groups to allow the teacher to observe the representations of two-digit numbers. Part 2 can be completed and recorded individually.
4. Assess using the standard rubric. Mathematical Knowledge can be assessed by checking the counting, representations, and comparisons. Strategic Knowledge can be assessed by observing the student creating the representations. Do they count by tens and ones, or must they begin with one and count on? Explanation can be assessed by listening to presentation of what was done and why it was done.

### Examples of Student Work not available

### Time Requirements

- One class period

### Resources

- Copies of the “All Kinds of Numbers” recording sheet
- Base 10 blocks, circle counters and cups
- ‘Garage Sale’ stickers (3/4” circle stickers)
- Mathematics Rubric

NAME \_\_\_\_\_ DATE \_\_\_\_\_

**ALL KINDS OF NUMBERS**

Student Recording Sheet

Count on by 2's and represent the ending number with your base ten blocks and counters and cups.

24 \_\_\_\_\_

78 \_\_\_\_\_

Write your ending numbers here and record the correct comparison notation (< or >)

\_\_\_\_\_

Count on by 10's and represent the ending number with your base ten blocks and counters and cups.

17 \_\_\_\_\_

29 \_\_\_\_\_

Write your ending numbers here and record the correct comparison notation (< or >)

\_\_\_\_\_

NAME \_\_\_\_\_ DATE \_\_\_\_\_

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Student Recording Sheet

**MY FRACTION POSTER**

You are given a set of 24 circle counters. Use circle stickers to represent the following fractions of the set and record them on this paper from the largest fraction to the smallest.

$\frac{1}{3}$     $\frac{1}{4}$     $\frac{1}{2}$

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LARGEST  
FRACTION

\_\_\_\_\_

MEDIUM  
FRACTION

\_\_\_\_\_

SMALLEST  
FRACTION

\_\_\_\_\_