**More or Less Than** $\frac{1}{2}$**?**

1. Ask students how they can use the Cuisenaire Rods to find the location of one half on the top number line. Allow students the opportunity to discuss their strategies with a partner or the class first before using the Cuisenaire Rods to justify where one half falls on the number line. (Note that students may initially only want to use two rods to find one half, but the line is more than double the length of the longest rod.)
2. Once students have located one half, have them mark that point on the number line and label it $\frac{1}{2}$ . Reinforce the idea of counting fractional parts and have students label 1 with $\frac{2}{2}$ .
3. Next, ask students to use the Cuisenaire Rods to partition the remaining lines into thirds, fourths, sixths and eighths. Marking and labeling the fractional parts on each line.
4. Once all of the lines have been partitioned, ask students to identify all fractions that are equivalent to $\frac{1}{2}$ and to write them in the center column of the chart.
5. Lead a class discussion on what students notice about the fractions written on the chart, especially focusing on the relationship between the numerator and the denominator.
6. Next, have students identify fractions that are less than $\frac{1}{2}$ . Repeat the discussion about the relationship between the numerator and denominator with these fractions. Students should notice that all of the numerators are less than half of the denominators.
7. Repeat with fractions that are greater than half on the number lines.
8. Extend to fractions that are not represented on the student’s number lines. (For example: What can we determine about $\frac{10}{20}$ or $\frac{2}{5}$ ?)

**More or Less Than** $\frac{1}{2}$**?**

1

0

|  |  |  |
| --- | --- | --- |
| **<** $\frac{1}{2}$ | **=** $\frac{1}{2}$ | **>** $\frac{1}{2}$ |
|  |  |  |
|  |  |  |
|  |  |  |