

Name:

Cuisenaire Rods – Equivalent Fractions

Note: Virtual Cuisenaire Rods are at <http://www.arcytech.org/java/integers/integers.html>

1. Start by creating all of the one-color trains that are as long as the orange-red rod (i.e., the length of the orange and red rod placed end to end). Place all of these one-color trains beneath the orange-red rod.
2. Name the fractions that are represented by each of the one-color trains. For example, the two dark-green rods each represent $\frac{1}{2}$, since two dark-green rods are as long as orange-red, which represents one whole.
 - a. Purple Rod: _____
 - b. Light Green Rod: _____
 - c. Red Rod: _____
 - d. White Rod: _____
3. Place a pencil on the set of rods, at the break in the dark-green train that shows $\frac{1}{2}$. Follow down the pencil to identify other fractions that are equivalent to $\frac{1}{2}$.
 - e. $\frac{1}{2} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
4. Use a similar procedure to find all of the other fractions that are equivalent to $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{6}$, $\frac{2}{3}$, and $\frac{3}{4}$. For each of these fractions, list all of the equivalent fractions.
5. Use the Cuisenaire Rods to show that $\frac{1}{6} < \frac{1}{3}$. Draw a picture of your Cuisenaire Rods below and explain how your picture demonstrates that $\frac{1}{6} < \frac{1}{3}$.
6. How could you explain to a student that $\frac{1}{4} < \frac{1}{3}$, even though $4 > 3$?