Unit 2, Lesson 4

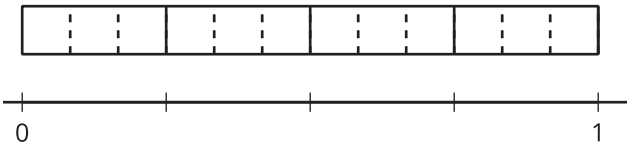
Same Size, Related Sizes

Let's find some fractions that are the same size.

Warm-up

Notice and Wonder: A Fraction Strip and a Number Line

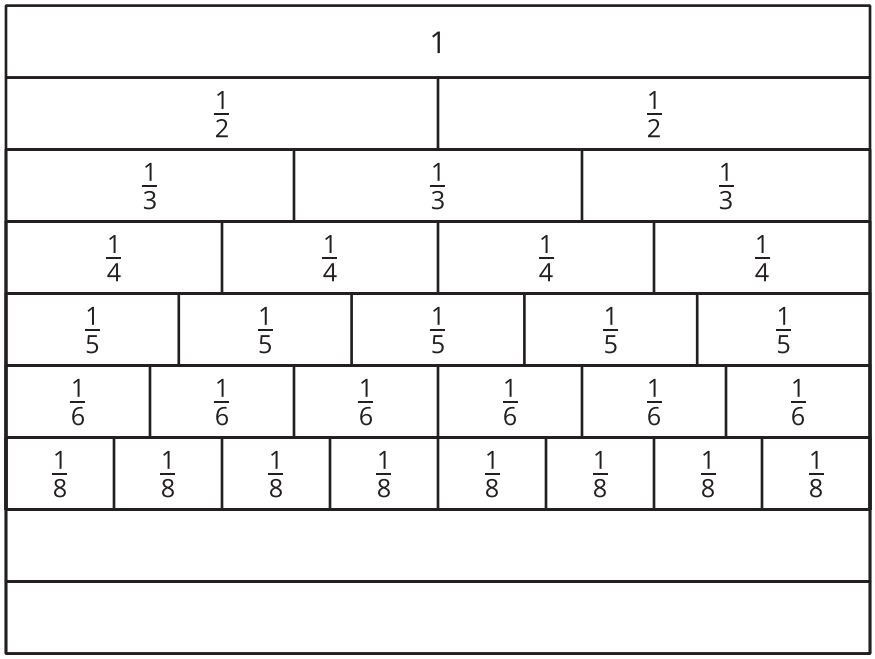
What do you notice? What do you wonder?



Activity 1

Same Size, Different Numbers

Here's a diagram of fraction strips, with two blank strips added.



1. Use one blank strip to show tenths. Label the parts. How did you partition the strip?

2. Use the other blank strip to show twelfths. Label the parts. How did you partition the strip?

3. Jada says, "I notice that 1 of the $\frac{1}{2}$ parts is the same size as 2 of the $\frac{1}{4}$ parts and 3 of the $\frac{1}{6}$ parts. So, $\frac{1}{2}$, $\frac{2}{4}$, and $\frac{3}{6}$ must be equivalent fractions." Jada's reasoning is correct.

   Find a fraction in the diagram that is equivalent to each of the following fractions. Be prepared to explain your reasoning.

   a. $\frac{1}{6}$

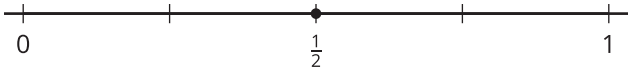
   b. $\frac{2}{10}$

   c. $\frac{3}{3}$

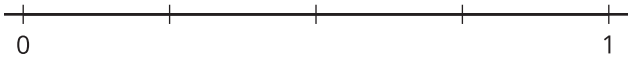
Activity 2

Fractions on Number Lines

1. The point on this number line shows the fraction $\frac{1}{2}$.



Label the tick marks on each number line.



2. You will locate $\frac{1}{6}$, $\frac{1}{8}$, and $\frac{1}{10}$ on one of the number lines.

   a. Which number line would you use for each fraction? Be prepared to explain your reasoning.

   b. Locate and label each fraction ($\frac{1}{6}$, $\frac{1}{8}$, and $\frac{1}{10}$) on a different number line.

3. Locate and label each fraction on one of the number lines.

$\frac{2}{6}$	$\frac{2}{8}$	$\frac{6}{8}$	$\frac{8}{10}$	$\frac{4}{6}$
$\frac{4}{8}$	$\frac{4}{10}$	$\frac{6}{6}$	$\frac{6}{10}$	$\frac{8}{8}$