Unit 2 Lesson 4: Same Size, Related Sizes

WU Notice and Wonder: A Fraction Strip and a Number Line (Warm up)

Student Task Statement

What do you notice? What do you wonder?
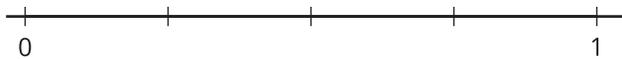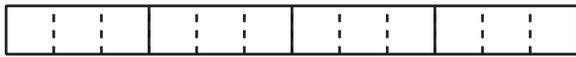
1 Same Size, Different Numbers

Student Task Statement

Here's a diagram of fraction strips, with two strips added for tenths and twelfths.
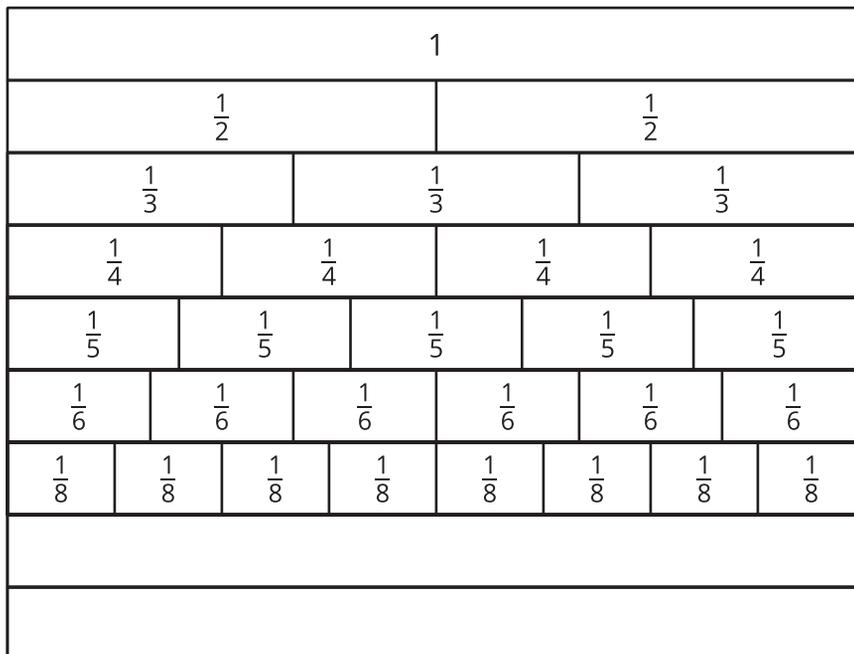
1. Use a blank strip to show tenths. Label the parts. How did you partition the strip?

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

3. Jada says, "I noticed that one part of $\frac{1}{2}$ is the same size as two parts of $\frac{1}{4}$ and three parts of $\frac{1}{6}$. So $\frac{1}{2}$, $\frac{2}{4}$, and $\frac{3}{6}$ must be **equivalent**."

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

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

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

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

2 Fractions on Number Lines

Student Task Statement

1. Here are some number lines. The point on this number line shows the fraction $\frac{1}{2}$.
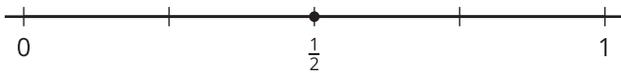
   Label the tick marks on each number line.
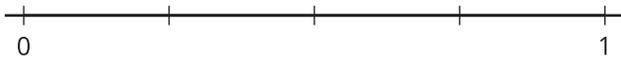
2. Suppose you are to locate $\frac{1}{6}$, $\frac{1}{8}$, and $\frac{1}{10}$ on one of the number lines.

   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 of the following fractions on one of the number lines.

   $\frac{2}{3}$ $\frac{2}{8}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{6}$

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