Help your students get familiar with creating models for unit fractions with this hands-on activity. Students will get into a frenzy creating many unit fraction models to reference as they learn more about fractions!

**Learning Objectives**

Students will be able to create models to represent unit fractions.

<table>
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<tr>
<th>Materials and Preparation</th>
<th>Key Terms:</th>
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</thead>
<tbody>
<tr>
<td>Index cards (10 per student)</td>
<td>fraction</td>
</tr>
<tr>
<td>Markers or colored pencils</td>
<td>numerator</td>
</tr>
<tr>
<td>Glue</td>
<td>denominator</td>
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<tr>
<td>Notebooks</td>
<td>unit fraction</td>
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### Lesson

**Introduction (10 minutes)**

- Explain to your students that they will be building fraction models.
- Remind students that a fraction is an equal part of one whole. Review that a numerator is the top number in a fraction, and the denominator is on the bottom.
- Define a unit fraction as a basic fraction with a numerator of 1.
- Write several examples on the board: ½, 1/3, ¼, etc.
- Show students that each has a numerator of 1 with a different denominator.
- Tell your students that they will create models.
Explicit Instruction/Teacher Modeling (10 minutes)

- Have your students return to their seats, and give out the materials.
- Hold up an index card.
- Explain that this rectangle represents 1 whole and that it is not broken into any parts yet. Show the unit fraction $\frac{1}{2}$, and explain that the fraction has two important pieces of information: the numerator and the denominator.
- Explain that the denominator indicates how many equal parts to break the whole into.
- Have students take one index card, and direct them to fold the card in half.
- Emphasize that the card is now broken into halves, and label each part as $\frac{1}{2}$.
- Explain that one of these parts is $\frac{1}{2}$ of the whole and that one part is a unit fraction.
- Repeat with $\frac{1}{3}$, and $\frac{1}{4}$. Continue to emphasize that each part must be equal, and the numerator must be 1.

Guided Practice/Interactive Modeling (15 minutes)

- Instruct your students to create unit fraction models for $\frac{1}{5}$, $\frac{1}{6}$, and $\frac{1}{7}$.
- Have students check with one another to make sure each part is equal.
- After each unit fraction, have one student share the model he created.
- Have students place all of the models they have created so far in front of them.
- Ask students what they notice about the fractions. For example, how does the size of the parts change as the denominator increases?

Independent Working Time (15 minutes)

- Have students continue to create models for unit fractions of $\frac{1}{8}$, $\frac{1}{10}$, and $\frac{1}{12}$.
- Direct your students to glue the models into their notebooks for future reference.
Extend

Differentiation

- **Enrichment:** Challenge students to create other models of unit fractions using different shapes such as circles, squares, etc. Students may also create more unit fractions with larger denominators.
- **Support:** For students who are struggling, draw the lines on the rectangle, and have the student determine the correct label.

Review

Assessment * (5 minutes) *

- During the lesson, circulate as students create and label unit fractions.
- At the end of the lesson, check your students' notebooks to make sure that students are creating accurate models of the unit fractions.

Review and Closing * (5 minutes) *

- Have students pair and share the definition of a unit fraction and share one example from their notebooks.