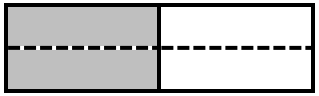
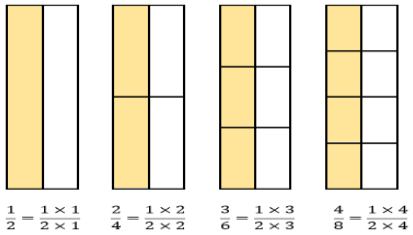
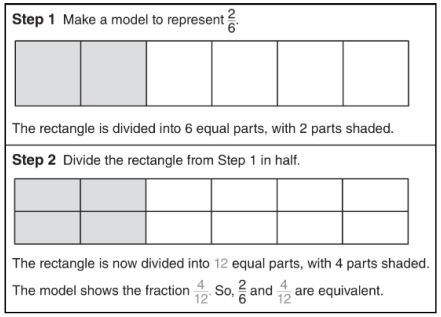
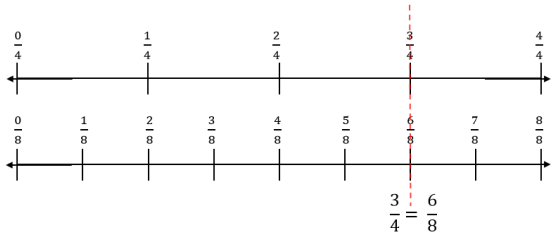
Grade 4

Equivalency and Comparing Fractions

Check out the "Parent Quick Smarts" video for this unit by using this link: https://goo.gl/cUjFpZ

Overarching Student Learning Goals In this unit, your child will work to build an understanding of the following:	**Resources/Tasks to support your child at home.**
Students can generate equivalent fractions for a given fraction using models, reasoning, or computations. Students can model a fraction and then break it up to find equivalent fractions.  Students can model a fraction like $\frac{1}{2}$ and then draw a line to show how it is equivalent to $\frac{2}{4}$.  $\frac{1}{2}=\frac{1\times1}{2\times1}$ $\frac{2}{4}=\frac{1\times2}{2\times2}$ $\frac{3}{6}=\frac{1\times3}{2\times3}$ $\frac{4}{8}=\frac{1\times4}{2\times4}$ Students will later learn how to use multiplication and division to find equivalent fractions. Before they do this they should first be able to do it with models.	• Give your child a fraction like $\frac{1}{3}$ or $\frac{3}{8}$ and ask them to list five fractions equivalent to it. • Find a fraction equivalent to $\frac{2}{5}$ that has a denominator of 20. • Learnzillion: https://bit.ly/2P9QzMJ Identify Equivalent Fractions Using Area Models • Khan Academy: Intro to Equivalent Fractions https://goo.gl/A2CQfT • Play Equivalent Fraction Bingo: https://bit.ly/1jngID9
Students can prove two fractions are equivalent using models, reasoning, or computations. Students can continue to make equivalent fractions and prove their work using models, reasoning, or computations.  **Step 1** Make a model to represent $\frac{2}{6}$. The rectangle is divided into 6 equal parts, with 2 parts shaded. **Step 2** Divide the rectangle from Step 1 in half. The rectangle is now divided into 12 equal parts, with 4 parts shaded. The model shows the fraction $\frac{4}{12}$. So, $\frac{2}{6}$ and $\frac{4}{12}$ are equivalent.  $\frac{3}{4}=\frac{6}{8}$ $\frac{5}{8}=\frac{5\times2}{8\times2}=\frac{10}{16}$	• Give your child a fraction and have them name an equivalent fraction and then prove it with a model or number line. • LearnZillion: https://bit.ly/2tL4orv Make Equivalent Fractions Using Multiplication • Play an equivalent fraction matching game: https://goo.gl/cZVfhf • Prove equivalent fractions using different models: http://illuminations.nctm.org/Activity.aspx?id=3510

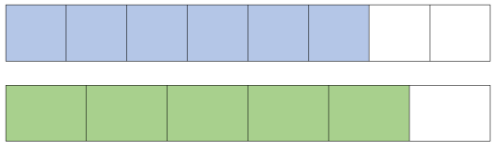
For more information on the learning goals and your child's progress, please contact your child's teacher.

Grade 4

Students can compare two fractions using models, reasoning, or computations.

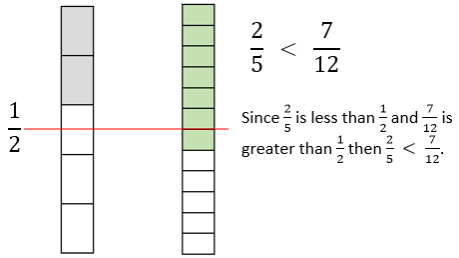
Students can use a variety of strategies for comparing fractions. They will use the greater than, less than, and equal sign (>, <, =) to show their comparisons.

They can draw models and use the models to compare the fractions.



$\frac{6}{8} < \frac{5}{6}$

Students may compare fractions to benchmarks like 0, $\frac{1}{2}$, and 1.



Students can rename fractions so they both have the same denominator and then compare the two fractions.

$\frac{5}{6} \bigcirc \frac{3}{4}$

$\frac{5}{6} = \frac{10}{12}$

$\frac{3}{4} = \frac{9}{12}$

$\frac{10}{12} > \frac{9}{12}$

- Recipes are great real-life opportunities to practice exploring equivalent fractions and strategies for comparing fractions with your child.
    - Encourage your child to find equivalent fractions for recipe ingredients. If a recipe calls for 14 cup sugar, you can ask what the equivalent amount of the 18cup measuring cup of sugar would be.
    - Your child can compare the fractional amount of ingredients required to make a recipe.
- Play Tug Team Fractions, a comparing fractions tug-a-war game: https://bit.ly/1j6UdoK
- Khan Academy: Comparing Fractions with Unlike Denominators https://goo.gl/MPNuov
- LearnZillion: https://bit.ly/2OzhYLg Compare Fractions Using ½ Benchmark