Unit 8

Family Letter

Florida Reveal MATH®

Dear Family,

In this unit, Fraction Equivalence, your child will learn how to identify and generate equivalent fractions and how to use different strategies to compare fractions. Your child will also order fractions and mixed numbers.

STEM Career Kid for this Unit

Hi, I'm Malik.

I want to be a photonics engineer. I will use math in my job when I study and use lasers. I'll show students how I will use fraction equivalence to calibrate lasers.

What math terms will your child use?

Term	Student Understanding
benchmark number	common fractions that can be used to measure or judge against when comparing fractions
denominator	the bottom number in a fraction
equivalent fractions	fractions that represent the same amount of the same sized whole
like denominator	the same bottom number in a fraction
like numerator	the same top number in a fraction
numerator	the top number in a fraction

Math @ Home Activity

What can your child do at home?

Work with your child to create a visual display of equivalent fractions. You can use blocks, beads, or pieces of paper for the displays. Include all proper fractions with denominators of 2, 3, 4, 5, 6, 8, 10, and 12. Connect all equivalent fractions with lines or some other distinction. Discuss any patterns you notice.

What Will Students Learn in This Module?

Equivalent Fractions

Your child will learn that equivalent fractions represent the same amount of the same size whole. The numerators and denominators of equivalent fractions have a relationship: the numerator and denominator of one fraction can be multiplied by the same number to get the numerator and denominator of the other fraction.

Example:

$\frac{1}{3}$ and $\frac{4}{12}$ are equivalent because

$\frac{1}{3} = \frac{1 \times 4}{3 \times 4} = \frac{4}{12}$

Comparing Fractions Using Benchmarks

Your child will practice using the benchmark numbers $\frac{1}{2}$ and 1 to compare two fractions. If one fraction is less than a benchmark number and the other fraction is greater than the benchmark number, the first fraction is less than the second.

Comparing Fractions Using Other Methods

Your child will compare fractions with like numerators and denominators. Your child will also compare fractions with unlike numerators and denominators by rewriting the fractions as equivalent fractions that have the same numerators or denominators. Then they will compare the fractions.

Example:

$\frac{4}{5} > \frac{4}{6}$	$\frac{4}{5}$ is greater than $\frac{4}{6}$ because fifths are larger than sixths.
$\frac{7}{10} < \frac{9}{10}$	$\frac{7}{10}$ is less than $\frac{9}{10}$ because there are less $\frac{1}{10}$ pieces in $\frac{7}{10}$ than in $\frac{9}{10}$.
$\frac{2}{4} < \frac{5}{8}$	$\frac{2}{4}$ is less than $\frac{5}{8}$ because $\frac{2}{4}$ is equivalent to $\frac{4}{8}$ and $\frac{4}{8}$ is less than $\frac{5}{8}$.

Order Fractions and Mixed Numbers

Your child will learn how to order fractions and mixed numbers by first generating equivalent fractions with like denominators. Then they will write the mixed number as a fraction and compare the fractions.