Family Letter

Content Overview

Dear Family,

Your child is learning about fraction concepts. Using fraction bars, students learn about unit fractions, or fractions that are just one part of the whole, such as $\frac{1}{2}$ or $\frac{1}{4}$.

$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4}$, or 1 whole

Non-unit fractions are sums of unit fractions.

$$\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

Unit fractions are used to convert mixed numbers, which have a whole-number part and a fraction part, to fractions in which the top number (numerator) is larger than the bottom number (denominator).

$$2\frac{1}{4} = \frac{4}{4} + \frac{4}{4} + \frac{1}{4} = \frac{9}{4}$$

Fraction bars help students understand how to compare, add, and subtract fractions with like denominators.

$$\frac{a}{d} + \frac{b}{d} = \frac{a+b}{d}$$

$$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$$

$$\frac{a}{d} - \frac{b}{d} = \frac{a-b}{d}$$

$$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$$

If $a > b$, then

$$\frac{1}{a} < \frac{1}{b} \text{ and } \frac{a}{d} > \frac{b}{d}$$

$$\frac{1}{3} < \frac{1}{2} \text{ and } \frac{3}{7} > \frac{2}{7}$$

These skills extend to fractions with unlike denominators. We rewrite each fraction with a common denominator, using multiplication to make an equivalent fraction.

$$\frac{1}{3} \xrightarrow{\times 5} \frac{5}{15} \xleftarrow{\times 5}$$

We add and subtract mixed numbers by treating the whole-number part and the fraction part separately, ungrouping 1 whole, if needed.

$$\begin{array}{rcl} & & 3\frac{20}{15} \\ 4\frac{1}{3} & = & 4\frac{5}{15} \\ -2\frac{7}{15} & = & 2\frac{7}{15} \\ \hline & & 1\frac{13}{15} \end{array}$$

Sincerely,
Your child's teacher

CA CC

Unit 1 addresses the following standards from the *Common Core State Standards for Mathematics with California Additions:* 5.NF.1 and 5.NF.2, and all Mathematical Practices.