Mathematical Background

Here is an overview of the content students will learn in this unit.

Fractions as Numbers

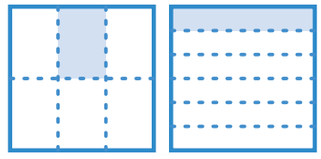
Understand fractions as numbers.

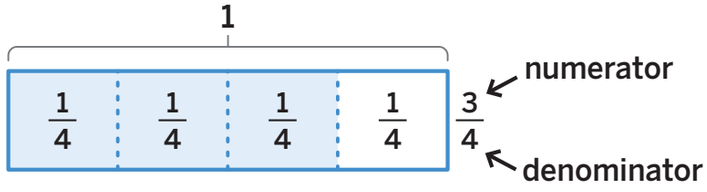
TEKS 3.3.A, 3.3.C, 3.3.E, 3.6.E

- A fraction is a number that describes parts of a whole that has been **partitioned** into equal parts.
  - » A fraction can be represented by partitioning **congruent** figures, sets of objects, strip diagrams, and using fraction notation.
  - » The **denominator** represents the number of equal parts that make up 1 whole. The **numerator** represents the number of equal parts being described.

1 out of 6 equal parts.

Fraction notation: $\frac{1}{6}$



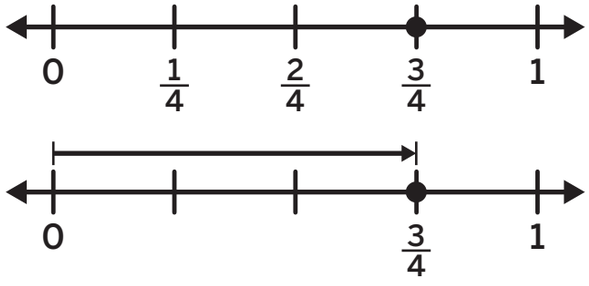


Understand the size and location of fractions in relation to 1 whole.

TEKS 3.3.A, 3.3.D

- A number line can be used to represent fractions as a point or as a distance from 0.
  - » A **non-unit fraction** can be represented as a sum of parts.

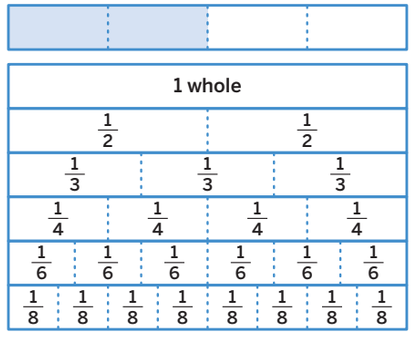
$\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$



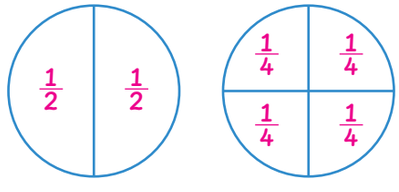
Understand equivalency and compare fractions.

TEKS 3.3.F, 3.3.G, 3.3.H

- Fraction strips and number lines can be used to generate **equivalent fractions**.
- **Unit fractions** can be compared by reasoning about the size of the parts.
  - » When a whole is partitioned into more parts, each part is smaller.



$\frac{2}{4}$ is equivalent to $\frac{1}{2}$.



$\frac{1}{2} > \frac{1}{4}$

Unit Investigation

Lesson 1 is the Unit Investigation. Students create and describe whole composite shapes and their parts to build curiosity and apply their own knowledge in a variety of ways. Use the **Caregiver Connection** to help students continue to explore the math they will see in the unit.

Caregiver Connection

Students may enjoy identifying objects that are made up of different equal parts, counting the number of parts, and naming each part. For example, a window can have 4 equal-sized glass panes. Each window pane is one fourth of the whole window.