

Family Letter

Unit 3 Math

Grade 3

Key Concepts for Unit 3



Vocabulary

Quadrilateral: A four sided

Rectangle: A four-sided closed figure with opposite sides that are equal and parallel. Corners are right angles.

Square: A four-sided closed figure with all sides that are equal and having opposite sides that are parallel. Corners are right angles.

Rhombus: A four-sided closed figure with opposite sides that are equal and parallel.

Parallelogram: A four-sided figure with opposite sides that are parallel.

Trapezoid: A four-sided figure with just one set of parallel sides.

Perimeter: The length around the outside of a shape.

- > Time to the minute
- > Elapsed time
- > Liquid measurements
- > Fractions on a number line
- > Equivalent fractions and comparing fractions
- > Attributes of shapes
- > Perimeter
- > Multiplication facts (7x, 8x, 9x)

Common Core State Standards for this Unit

3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as beaker with a measurement scale) to represent the problem.

3.NF.1 Understand a fraction as a number on the number line; represent fractions on a number line diagram.

- Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.
- Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.

3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

3.G.A.1 Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category.

3.MD.8 Solve real world and mathematical problems involving perimeters of polygons.

3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division.

Further explanation . . .

3.NF.2

Students will need to understand the basic concept that a fraction shows a whole divided into equal sections.

A fraction such as $\frac{2}{4}$ is the same as two sections that are each $\frac{1}{4}$ of the whole. Another example of this idea: $\frac{3}{8}$ is the same as 3 sections that are each $\frac{1}{8}$ of the whole.

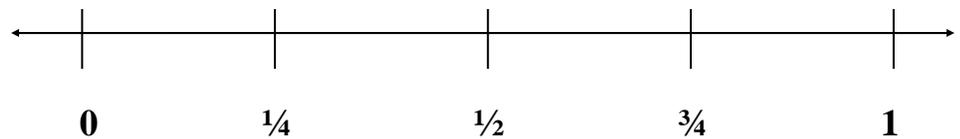
3.NF.1

Number lines are used often during this unit in order to help the students understand that fractions have real value as numbers.

Students will be asked to place fractions on a number line. In order to do this, they must understand that the bottom number of the fraction (the denominator) tells how many equal sections there should be between 0 and 1 on the number line.

To avoid a common error: Students must remember to count the number of sections on a number line, not how many lines divide the number line.

Sample: Fractions on a Number Line



Keep in mind...

- **By the end of the year third graders are expected to be able to give the answers to multiplication facts $0x$ to $10x$ without having to take time to calculate.**