

**Kid and Parent Friendly  
Content Standards  
for  
English Language Arts and Mathematics**

Fourth Grade Mathematics Standards

NUMBER SENSE

1.0 Place Value

- \_\_\_\_\_ Read and write numbers to millions.
- \_\_\_\_\_ Order whole numbers and two place decimals.
- \_\_\_\_\_ Round numbers to nearest 100,000.
- \_\_\_\_\_ Decide when a rounded solution is good.
- \_\_\_\_\_ Divide a whole number by a whole number.
- \_\_\_\_\_ Write 10ths/100ths in decimals and fractions.
- \_\_\_\_\_ Write a fraction from a drawing of its parts.
- \_\_\_\_\_ Use concepts of negative numbers.
- \_\_\_\_\_ Show fractions on a number line.

2.0 Computation—Decimals

- \_\_\_\_\_ Add and subtract whole numbers and two-place decimals.
- \_\_\_\_\_ Round two-place decimals.

3.0 Computation—Whole Numbers

- \_\_\_\_\_ Add and subtract multi-digit numbers.
- \_\_\_\_\_ Multiply by two digits/divide by one digit.
- \_\_\_\_\_ Multiply multi-digits by two digit numbers.
- \_\_\_\_\_ Divide multi-digits by one digit number.

4.0 Factoring

- \_\_\_\_\_ Factor whole numbers.

\_\_\_\_\_ Certain numbers do not have factors.

## ALGEBRA AND FUNCTIONS

### 1.0 Number Sentences/Expressions

\_\_\_\_\_ Use letters and symbols to represent numbers.

\_\_\_\_\_ Understand math expressions that use parentheses.

\_\_\_\_\_ Use parentheses to show order of operations.

\_\_\_\_\_ Use and interpret formulas.

\_\_\_\_\_ Know equations are prescriptions to find a number.

### 2.0 Manipulate Equations

\_\_\_\_\_ Know equals added to equals are equal.

\_\_\_\_\_ Know equals multiplied by equals are equal.

## MEASUREMENT AND GEOMETRY

### 1.0 Area and Perimeter

\_\_\_\_\_ Measure area of rectangular shapes.

\_\_\_\_\_ Compare rectangles with same area.

\_\_\_\_\_ Know that rectangles with same perimeter can have different areas.

\_\_\_\_\_ Know and use formulas for perimeter and area.

### 2.0 Coordinate Grids

\_\_\_\_\_ Draw points on a graph ( $y=3x$ )

\_\_\_\_\_ Understand horizontal line on graph.

\_\_\_\_\_ Understand vertical line on graph.

### 3.0 Geometry

\_\_\_\_\_ Identify parallel and perpendicular lines.

\_\_\_\_\_ Identify radius and diameter of a circle.

- \_\_\_\_\_ Identify congruent figures.
- \_\_\_\_\_ Identify bilateral and rotational symmetry
- \_\_\_\_\_ Know right, acute, and obtuse angles.
- \_\_\_\_\_ Describe and make models of geometric solids.
- \_\_\_\_\_ Know definitions and attributes of triangles.
- \_\_\_\_\_ Know definitions of quadrilaterals.

## STATISTICS, DATA ANALYSIS, AND PROBABILITY

### 1.0 Data Analysis

- \_\_\_\_\_ Collect and represent data.
- \_\_\_\_\_ Identify mode and medium of data sets.
- \_\_\_\_\_ Interpret 1 & 2 variable data graph.

### 2.0 Making Predictions

- \_\_\_\_\_ State outcomes of probability situations.
- \_\_\_\_\_ Express outcomes of probability experiments.

## MATHEMATICAL REASONING

### 1.0 Make Decisions about a Problem

- \_\_\_\_\_ Identify relationships in problems.
- \_\_\_\_\_ Know when and how to break apart problems.

### 2.0 Solve Problems/Justify Reasoning

- \_\_\_\_\_ Use estimations to verify results.
- \_\_\_\_\_ Apply strategies to complex problems.
- \_\_\_\_\_ Use methods to explain math reasoning.
- \_\_\_\_\_ Express solutions clearly.
- \_\_\_\_\_ Know advantage of exact or approximate results.

\_\_\_\_\_ Make precise calculations and verify result.

### 3.0 Make Connections

\_\_\_\_\_ Evaluate reasonableness of a result.

\_\_\_\_\_ Note methods of deriving solution.

\_\_\_\_\_ Develop generalization of the result.