

# What Fourth Graders are Learning in Math

(Based on *Grade Expectations for Vermont Framework of Standards and Learning Opportunities* and the *Bridges in Mathematics Curriculum*)

## Arithmetic, Number and Operations

We are learning to:

- Work with positive fractional numbers
- Use various mathematical operations with numbers 0 to 999,999
- Understand that multiplication and division are inverse operations
- Identify multiples and factors
- Add and subtract decimals
- Multiplication of whole numbers
- Division of whole numbers
- Addition and subtraction of fractions with like denominators
- Mentally multiply whole numbers through twelve
- Problem solving using factors, multiples, remainders, decomposition and composition
- Estimation and evaluation of reasonableness of a solution

## Geometry and Measurement

We are learning to:

- Define terms such as parallelism, perpendicularity, congruent, reflection, rotation and translation.
- Identify geometric shapes (two and three dimensional) by the attributes
- Classify angles relative to 90°
- Find perimeter and area of polygons or irregular shapes
- Elapsed and accrued time to the quarter hour
- Use a coordinate grid system
- How to measure accurately and which unit of measure to use

## Data, Statistics and Probability

We are learning to:

- Interpret various graphs such as: line plots, bar graphs, pictographs, circle graphs, tally charts and Venn diagrams.
- Use the information found the graphs to answer questions, analyze the data, justify conclusions and solve problems.
- Create a line plot
- Find measures of central tendency such as: mode, median and range
- Understands the theoretical probability of an event occurring
- Finds the experimental probability, records outcomes and describes the likelihood of an event occurring as impossible, unlikely, equally unlikely, likely and certain.
- Write probability as a ratio

## Functions and Algebra

We are learning to:

- Identify and extend a variety of patterns
- Write rules in words and symbols
- Solve one step linear equations
- Simplify numerical expressions
- Using letters or symbols to represent unknown quantities write a simple linear algebraic expression