

# NORTH BRANFORD PUBLIC SCHOOLS

## Essential Curriculum

### Mathematics

#### *Grade 1*

The K-5 math curriculum includes number sense, operations, estimation, ratio, proportion, percent, measurement, spatial relationships, geometry, probability, statistics, patterns, algebra, functions and discrete mathematics. Students develop understanding of these concepts through inquiry, exploration, observation, prediction, analysis, problem solving, communicating ideas and making connections between concepts and to the real world.

Upon completion of Grade 1, children will be able to:

- Use numbers to count, compare, locate, measure and label.
- Explore fraction concepts with concrete and pictorial models.
- Build place value models.
- Recognize, name, count, trade and compare values of sets of pennies, nickels and dimes.
- Use objects, pictures and models to add and subtract.
- Create and share story problems with addition and subtraction.
- Explore computation strategies for addition and subtraction to develop fluency with facts to 10.
- Classify, sort, combine and separate sets of objects.
- Develop, verbalize, and use a variety of estimation strategies in a wide range of situations.
- Show, describe and record simple ratios with concrete materials and from real-life experiences.
- Sort and compare objects by length, area, volume, weight and temperature.
- Estimate and measure length, area, weigh, and volume.
- Use a calendar and tell time to the hour and half-hour; describe and estimate the passage of time.
- Recognize, name, build, copy, draw and sort 2- and 3-dimensional shapes and objects.
- Name relative position, direction and location.
- Pose questions, collect data, record, organize, represent and analyze data.
- Describe and explain the likelihood of various events in the real world.
- Recognize, describe, extend and create a variety of patterns; develop and test generalizations of patterns.
- Model real life situations that involve addition and subtraction of whole numbers using objects, pictures and number sentences.
- Sort, classify, and order objects and numbers; organize data to solve problems.
- Explore sequences, networks, combinations and multi-step tasks.