

Math – Grade 2

(2.1) Number, operation, and quantitative reasoning. The student understands how place value is used to represent whole numbers. The student is expected to:

(A) Use concrete models to represent, compare, and order whole numbers (through 999), read the numbers, and record the comparisons using numbers and symbols ($>$, $<$, $=$)

(2.2) Number, operation, and quantitative reasoning. The student uses fraction words to name parts of whole objects or sets of objects. The student is expected to:

(A) name fractional parts of a whole object (not to exceed twelfths) when given a concrete representation; and

(B) name fractional parts of a set of objects (not to exceed twelfths) when given a concrete representation.

(2.3) Number, operation, and quantitative reasoning. The student adds and subtracts whole numbers to solve problems. The student is expected to:

(A) recall and apply basic addition facts (sums and differences to 18);

(B) select addition or subtraction and solve problems using two-digit numbers, whether or not regrouping is necessary; and

(C) determine the value of a collection of coins less than one dollar.

(2.4) Number, operation, and quantitative reasoning. The student models multiplication and division. The student is expected to:

(A) model, create, and describe multiplication situations in which equivalent sets of concrete objects are joined; and

(B) model, create, and describe division situations in which a set of concrete objects is separated into equivalent sets.

(2.5) Patterns, relationships, and algebraic thinking. The student uses patterns in numbers and operations. The student is expected to:

(A) find patterns in numbers such as in a 100s chart

(B) use patterns in place value to compare and order whole numbers through 999

(C) use patterns to develop strategies to remember basic addition facts; and

(D) solve subtraction problems related to addition facts (fact families) such as $8 + 9 = 17$, $9 + 8 = 17$, $17 - 8 = 9$, and $17 - 9 = 8$.

(E) identify identity element, commutative property, and inverse in number sentences

(F) find missing addends in a number sentence

(2.6) Patterns, relationships, and algebraic thinking. The student uses patterns to describe relationships and make predictions. The student is expected to:

(A) generate a list of paired numbers based on a real-life situation such as number of tricycles related to number of wheels;

(B) identify patterns in a list of related number pairs based on a real-life situation and extend the list; and

(C) identify, describe, and extend patterns to make predictions and solve problems.

(2.7) Geometry and spatial reasoning. The student uses attributes to identify, compare, and contrast shapes and solids. The student is expected to:

(A) identify attributes of any shape or solid;

(B) use attributes to describe how two shapes or two solids are alike or different; and

(C) cut geometric shapes apart and identify the new shapes made.

(D) identify objects with lines of symmetry

(2.8) Geometry and spatial reasoning. The student recognizes that numbers can be represented by points on a line. The student is expected to

(A) use whole numbers to locate and name points on a line.

(2.9) Measurement. The student recognizes and uses models that approximate standard units (metric and customary) of length, weight, capacity, and time. The student is expected to:

(A) identify concrete models that approximate standard units of length, capacity, and weight;.

(B) measure length, capacity, and weight using concrete models that approximate standard units; and

(D) solve problems using a calendar

(2.10) Measurement. The student uses standard tools to measure time and temperature. The student is expected to:

(A) read a thermometer to gather data; and

(B) describe time on a clock using hours and minutes.

(C) use linear measure to find the perimeter of a shape;

(2.11) Probability and statistics. The student organizes data to make it useful for interpreting information. The student is expected to:
(A) construct picture graphs and bar-type graphs;
(B) draw conclusions and answer questions based on picture graphs and bar-type graphs; and
(C) use data to describe events as more likely or less likely such as drawing a certain color crayon from a bag of seven red crayons and three green crayons.
(2.12) Underlying processes and mathematical tools. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:
(A) identify the mathematics in everyday situations;
(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;
(C) select or develop an appropriate problem-solving strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and
(D) use tools such as real objects, manipulatives, and technology to solve problems.
(2.13) Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language. The student is expected to:
(A) explain and record observations using objects, words, pictures, numbers, and technology; and
(B) relate informal language to mathematical language and symbols.
(2.14) Underlying processes and mathematical tools. The student uses logical reasoning to make sense of his or her world. The student is expected to:
(A) reason and support his or her thinking using objects, words, pictures, numbers, and technology.