

Math – Grade 1

(1.1) Number, operation, and quantitative reasoning. The student uses whole numbers to represent whole numbers to describe and compare quantities. The student is expected to:

(A) compare and order whole numbers beyond 100 (less than, greater than, or equal to) using sets of concrete objects and pictorial models;

(B) create sets of tens and ones using concrete objects to describe, compare, and order whole numbers;

(C) use words and numbers to describe the values of individual coins such as penny, nickel, dime, and quarter and their relationships; and

(D) read and write numbers to 99 to describe sets of concrete objects.

(E) count backwards

(F) read and write ordinal symbols

(1.2) Number, operation, and quantitative reasoning. The student uses pairs of whole numbers to describe fractional parts of whole objects or sets of objects. The student is expected to:

(A) share a whole by separating it into equal parts and use appropriate language to describe the parts ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$)

(B) use appropriate language to describe part of a set such as three out of the eight crayons are red.

(1.3) Number, operation, and quantitative reasoning. The student recognizes and solves problems in addition and subtraction situations. The student is expected to:

(A) model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences; and

B) learn and apply basic addition facts up to 3 addends (sums and differences to 18) using concrete models, including a number line

C) recalls addition and subtraction facts to 10

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

(A) identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems; and

(B) use patterns to skip count by twos, fives, and tens.

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

(A) find patterns in numbers, including odd and even;

(B) compare and order whole numbers using place value; and.

(C) identify patterns in related addition and subtraction sentences (fact families for sums to 18) such as $2 + 3 = 5$, $3 + 2 = 5$, $5 - 2 = 3$, $5 - 3 = 2$.

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

(E) find missing addends to solve number sentences

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

(A) describe and identify objects in order to sort them according to a given attribute using informal language;

(B) identify circles, triangles, and rectangles, including squares, and describe the shape of balls, boxes, cans, and cones as spheres, cubes, prisms, cones and cylinders

C) combine geometric shapes to make new geometric shapes using concrete models.

(D) recognize a line of symmetry

(1.7) Measurement. The student uses nonstandard units to describe length, weight, and capacity. The student is expected to:

(B) describe the relationship between the size of the unit and the number of units needed in a measurement.

(C) measure length using standard units of inches, feet, and centimeters

(1.8) Measurement. The student understands that time and temperature can be measured. The student is expected to:
(A) recognize temperatures such as a hot day or a cold day;
(B) describe time on a clock using hours and half hours and quarter hours
(C) order three or more events by how much time they take.
(D) solve problems using a calendar; differentiate days & dates; know mons of the year
(1.9) Probability and statistics. The student displays data in an organized form. The student is expected to:
(A) recognize, collect and sort data; and use organized data to construct real object graphs, picture graphs, and bar-type graphs.
(1.10) Probability and statistics. The student uses information from organized data. The student is expected to:
(A) draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs; and
(B) identify events as certain or impossible such as drawing a red crayon from a bag of green crayons.
(1.11) Underlying processes and mathematical tools. The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:
(A) identify mathematics in everyday situations;
(B) use a problem-solving model, with guidance as needed, 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.
(1.12) Underlying processes and mathematical tools. The student communicates about Grade 1 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.
(1.13) Underlying processes and mathematical tools. The student applies and utilizes knowledge to solve problems. The Student is expected to:
(A) Underlying processes and mathematical tools. The student uses logical reasoning to make sense of his or her world. The student is expected to reason and support his or her thinking using objects, words, pictures, numbers, and technology.