

## READINESS STANDARDS - Grade 1 Math

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

(D) read and write numbers to 99 to describe sets of concrete objects	Numbers (0-99), Ones, Tens
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(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:

(B) use appropriate language to describe part of a set such as three out of the eight crayons are red	Out of, Part, Whole, Set
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(1.3) **Number, operation, and quantitative reasoning.** The student recognizes and solves problems in addition and subtraction situations. The student is expected to:

(B) use concrete and pictorial models to apply basic addition and subtraction facts (up to $9 + 9 = 18$ and $18 - 9 = 9$ )	Addition, Subtraction, Fact families
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(1.5) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. The student is expected to:

(C) compare and order whole numbers using place value	Value, Place, One, Ten
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(E) identify patterns in related addition and subtraction sentences (fact families for sums to 18) such as $2 + 3 = 5$ , $3 + 2 = 5$ , $5 - 2 = 3$ , and $5 - 3 = 2$	Addition, Subtraction, Fact families
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(1.6) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two- and three-dimensional geometric figures or both. The student is expected to:

(A) describe and identify two-dimensional geometric figures, including circles, triangles, rectangles, and squares (a special type of rectangle)	Figure, Two-dimensional, Side, Vertices, Circle, Triangle, Square, Rectangle
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(B) describe and identify three-dimensional geometric figures, including spheres, rectangular prisms (including cubes), cylinders, and cones	Attributes, Vertices, Faces, Edges, Sides, Three-dimensional, Sphere, Rectangular prism, Cube, Cylinder, Cone
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(1.7) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. The student is expected to:

(A) estimate and measure length using nonstandard units such as paper clips or sides of color tiles	Length, Long, Longer than, Shorter than, Same as, Is about, Is a little shorter than, Is a little longer than
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(1.9) **Probability and statistics.** The student displays data in an organized form. The student is expected to:

(B) use organized data to construct real-object graphs, picture graphs, and bar-type graphs	Data, Graph, Bar-type graph, Picture graph, Real-object graph, Vertical, Horizontal, Title, Label
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## READINESS STANDARDS - Grade 1 Math

(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	Data, Graph, Bar-type graph, Picture graph, Real-object graph, Vertical, Horizontal, Title, Label, More, Most, Fewer, Least
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(1.5) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. The student is expected to:

(A) use patterns to skip count by twos, fives and tens	Count by, Ones, Tens, Fives, Even, Odd
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## SUPPORTING STANDARDS - Grade 1 Math

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

(A) compare and order whole numbers up to 99 (less than, greater than, or equal to) using sets of objects and pictorial models	Whole numbers, Greater than, Less than, Equal to
(B) create sets of tens and ones using concrete objects to describe, compare, and order whole numbers	Place Value, One, Ten, Hundred, One-digit number, Two-digit number
(C) identify individual coins by name and value and describe relationships among them	Penny, Nickel, Dime, Quarter, Half dollar, Heads, Tails, Cent, Equal

(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) separate a whole into two, three, or four equal parts and use appropriate language to describe the parts such as three out of four equal parts	Part, Whole, Equal Parts, Out of
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(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	Addition, Subtraction, Number sentence
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(1.4) **Patterns, relationships, and algebraic thinking.** The student uses repeating patterns and additive patterns to make predictions. The student is expected to identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems.

(A) identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems	Pattern, Repeat, Add
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(1.5) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. The student is expected to:

(B) find patterns in numbers, including odd and even	Pattern, Even, Odd
(D) use patterns to develop strategies to solve basic addition and basic subtraction problems	Pattern, Double, Even, Odd

# SUPPORTING STANDARDS - Grade 1 Math

(1.6) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two- and three-dimensional geometric figures or both. The student is expected to:

(C) describe and identify two- and three-dimensional geometric figures in order to sort them according to a given attribute using informal and formal language	Vertices, Edges, Faces, Circle, Square, Rectangle, Triangle, Rectangular Prism, Cube, Cone, Cylinder, Sphere
(D) use concrete models to combine two-dimensional geometric figures to make new geometric figures	Compare, Contrast, Create, Circle, Square, Rectangle, Triangle

(1.7) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. The student is expected to:

(B) compare and order two or more concrete objects according to length (from longest to shortest)	Compare, Order, Length, Longest, Shortest
(C) describe the relationship between the size of the unit and the number of units needed to measure the length of an object	Compare, Order, Length, More, Less, Unit
(D) compare and order the area of two or more two-dimensional surfaces (from covers the most to covers the least)	Compare, Order, Area, Covers the most, Covers the least
(E) compare and order two or more containers according to capacity (from holds the most to holds the least)	Compare, Order, Capacity, Container, Holds the most, Holds the least
(F) compare and order two or more objects according to weight/mass (from heaviest to lightest)	Compare, Order, Weight/mass, Heavier than, Lighter than
(G) compare and order two or more objects according to relative temperature (from hottest to coldest)	Compare, Order, Temperature, Hotter, Colder

(1.8) **Measurement.** The student understands that time can be measured. The student uses time to describe and compare situations. The student is expected to:

(A) order three or more events according to duration	Order, Event, Takes more time than, Takes less time than, Takes the same amount of time as
(B) read time to the hour and half-hour using analog and digital clocks	Time, Hour, Half-hour, Analog clock, Digital clock

(1.9) **Probability and statistics.** The student understands that time can be measured. The student uses time to describe and compare situations. The student is expected to:

(A) collect and sort data	Data, Collect, Sort
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(1.10) **Probability and statistics.** The student uses information from organized data. The student is expected to:

(B) identify events as certain or impossible such as drawing a red crayon from a bag of green crayons	Event, Certain, Impossible, Possible
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