

Grade 2 Grade-Level Expanded Expectations

NUMBER SENSE AND OPERATIONS IN BASE TEN: NBT

2.NBT.A	Understand place value of three digit numbers.	
2.NBT.A.1	Understand three-digit numbers are composed of hundreds, tens and ones.	The expectation of the student is to understand three-digit numbers are composed of hundreds (100, 200, 300...), tens (10, 20, 30,...) and ones (zero, one, two, three...). (e.g., How many 10s are in 120?)
2.NBT.A.2	Understand that 100 can be thought of as 10 tens – called a “hundred”.	The expectation of the student is to understand that 100 can be thought of as 10 tens– called a “hundred”.
2.NBT.A.3	Count within 1000 by 1s, 10s and 100s starting with any number.	The expectation of the student is to count on within 1000 by 1s, 10s and 100s starting with any number.
2.NBT.A.4	Read and write numbers to 1000 using number names, base-ten numerals and expanded form.	The expectation of the student is to read and write numbers to 1000 using number names, base-ten numerals and expanded form.
2.NBT.A.5	Compare two three-digit numbers using the symbols $>$, $=$ or $<$.	The expectation of the student is to compare two three-digit numbers based on meaning of hundreds, tens and ones digits and recording the results of comparison using the symbols $<$, $>$ or $=$.
2.NBT.B	Use place value understanding and properties of operations to add and subtract.	
2.NBT.B.6	Demonstrate fluency with addition and subtraction within 100.	The expectation of the student is to demonstrate fluency of addition and subtraction with numbers and results within 100 using strategies based on place value (including composing and decomposing tens), properties of operations and/or the relationship between addition and subtraction. <i>(Fluency refers to accuracy and efficiency and does not equate to memorization.)</i>
2.NBT.B.7	Add up to four two-digit numbers.	The expectation of the student is to add up to four two-digit numbers using strategies based on place-value and properties of operations.

2.NBT.B.8	Add or subtract within 1000, and justify the solution.	The expectation of the student is to add and/or subtract with numbers and results within 1000, (including situations requiring composing and decomposing hundreds and tens) and justify answers using concrete models, drawings or symbols which convey strategies connected to place value understanding. <i>(Note: Concrete models and/or drawings should be used as appropriate for initial development of concepts.)</i>
2.NBT.B.9	Use the relationship between addition and subtraction to solve problems.	The expectation of the student is to use the relationship between addition and subtraction to solve problems. <i>(e.g., If Kurt had 47 video games and sold 29 of them, how many does he still own? This problem could be solved by adding up from 29 to 47)</i>
2.NBT.B.10	Add or subtract mentally 10 or 100 to or from a given number within 1000.	The expectation of the student is to mentally add/subtract 10 or 100 to/from a given number with the result within 1000.
2.NBT.C	Represent and solve problems involving addition and subtraction.	
2.NBT.C.11	Write and solve problems involving addition and subtraction within 100.	The expectation of the student is to write and solve problems involving addition and subtraction within 100. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions (e.g., using drawings and/or equations with a symbol for the unknown number to represent the problem.)
RELATIONSHIPS AND ALGEBRAIC THINKING: RA		
2.RA.A	Add and subtract within 20.	
2.RA.A.1	Demonstrate fluency with addition and subtraction within 20.	The expectation of the student is to demonstrate fluency with sums and differences using mental strategies. Sums should have results within 20. The starting point for subtraction problems should be within 20. Know all sums of two one-digit numbers. While automaticity for basic facts is desired, quick use of mental strategies may suffice. <i>(Fluency refers to accuracy and efficiency and does not equate to memorization.)</i>
2.RA.B	Develop foundations for multiplication and division.	

2.RA.B.2	<p>Determine if a set of objects has an odd or even number of members.</p> <ul style="list-style-type: none"> a) Count by 2s to 100 starting with any even number. b) Express even numbers as pairings/groups of 2, and write an expression to represent the number using addends of 2. c) Express even numbers as being composed of equal groups and write an expression to represent the number with 2 equal addends. 	<p>The expectation of the student is to determine if a group of objects has an odd or even number of members.</p> <p>For example:</p> <ul style="list-style-type: none"> a. Count by 2s to 100 starting with any even number. b. Express even numbers as pairings/groups of 2 and write an expression to represent the number using addends of 2. (For example, 8 can be represented as $2 + 2 + 2 + 2$.) c. Express even numbers as being composed of two equal groups and write an expression to represent the number with 2 equal addends. (e.g., 8 can be represented as $4 + 4$.)
2.RA.B.3	<p>Find the total number of objects arranged in a rectangular array with up to 5 rows and 5 columns, and write an equation to represent the total as a sum of equal addends.</p>	<p>The expectation of the student is to use addition to find the total number of objects arranged in a rectangular array with up to 5 rows and 5 columns, and write an equation to represent the total as a sum of equal addends. (e.g., a 3×4 array can be thought of as 4 groups of 3 and represented as $3 + 3 + 3 + 3$ or as 3 groups of 4 and represented as $4 + 4 + 4$.)</p>

GEOMETRY AND MEASUREMENT: GM

2.GM.A	Reason with shapes and their attributes.	
2.GM.A.1	<p>Recognize and draw shapes having specified attributes, such as a given number of angles or sides.</p> <ul style="list-style-type: none"> a) Identify triangles, quadrilaterals, pentagons, hexagons, circles and cubes. b) Identify the faces of three-dimensional objects. 	<p>The expectation of the student is to recognize and draw shapes having specified attributes, such as a given number of angles or sides. Identify triangles, quadrilaterals, pentagons, hexagons, circles and cubes. Understand that three-dimensional objects (prisms and pyramids) have two-dimensional faces and identify the shapes of those faces.</p>
2.GM.A.2	<p>Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares.</p>	<p>The expectation of the student is to partition a rectangle into rows and columns of approximately same-size squares and count to find the total number of them.</p>

2.GM.A.3	Partition circles and rectangles into two, three or four equal shares, and describe the shares and the whole. a) Demonstrate that equal shares of identical wholes need not have the same shape.	The expectation of the student is to partition circles and rectangles into two, three or four equal shares; describe the shares using the words <i>halves</i> , <i>thirds</i> , <i>half of</i> , <i>a third of</i> , etc., and describe the whole as two halves, three thirds, four fourths, etc.. Demonstrate that equal shares of identical wholes need not have the same shape.
2.GM.B	Measure and estimate lengths in standard units.	
2.GM.B.4	Measure the length of an object by selecting and using appropriate tools.	The expectation of the student is to estimate and measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks and measuring tapes.
2.GM.B.5	Analyze the results of measuring the same object with different units.	The expectation of the student is to analyze the results of measuring the same object with different unit. (e.g., Measure your pencil in inches and in centimeters.)
2.GM.B.6	Estimate lengths using units of inches, feet, yards, centimeters and meters.	The expectation of the student is to estimate lengths using units of inches, feet, yards, centimeters and meters. Recognize that the size of the measurement unit used is related to the number of units needed to measure the object. (e.g., When larger units are used, fewer of the units will be used to measure the object.)
2.GM.B.7	Measure to determine how much longer one object is than another.	The expectation of the student is to estimate and measure to determine how much longer one object is than another, expressing the length difference in terms of a standard unit of length.
2.GM.C	Relate addition and subtraction to length.	
2.GM.C.8	Use addition and subtraction within 100 to solve problems involving lengths that are given in the same units.	The expectation of the student is to use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units. (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem)
2.GM.C.9	Represent whole numbers as lengths on a number line, and represent whole-number sums and differences within 100 on a number line.	The expectation of the student is to represent whole numbers as lengths on a number line diagram and represent whole-number sums and differences within 100 using a number line diagram.
2.GM.D	Work with time and money.	

2.GM.D.10	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	The expectation of the student is to tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
2.GM.D.11	Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.	The expectation of the student is to describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock. (Use only times shown to the nearest 5 minutes.)
2.GM.D.12	Find the value of combinations of dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ appropriately.	The expectation of the student is to find and represent the value of combinations of dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ appropriately.
2.GM.D.13	Find combinations of coins that equal a given amount.	The expectation of the student is to find combinations of coins that equal a given amount. <i>For example, 50¢ can be shown as two quarters, five dimes, ten nickels; or one quarter, two dimes and one nickel, etc.</i>

DATA AND STATISTICS: DS

2.DS.A	Represent and interpret data.	
2.DS.A.1	Create a line plot to represent a set of numeric data, given a horizontal scale marked in whole numbers.	The expectation of the student is given a horizontal scale marked in whole numbers, create a line plot to represent a given set of numeric data.
2.DS.A.2	Generate measurement data to the nearest whole unit, and display the data in a line plot.	The expectation of the student is to generate measurement data by measuring lengths of several related objects (e.g., shoe lengths) to the nearest whole unit or by making multiple measurements of the same object (e.g., the length of the room). Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
2.DS.A.3	Draw a picture graph or a bar graph to represent a data set with up to four categories.	The expectation of the student is to draw a picture graph and/or a bar graph (with single-scale) to represent a data set with up to four categories.
2.DS.A.4	Solve problems using information presented in line plots, picture graphs and bar graphs.	The expectation of the student is to solve problems using information presented in line plots, picture graphs and bar graphs. Solve simple addition and subtraction (put-together, take-apart and compare) problems using information presented in a bar graph.
2.DS.A.5	Draw conclusions from line plots, picture graphs and bar graphs.	The expectation of the student is to draw conclusions from line plots, picture graphs and bar graphs.