

3rd Grade WASL Item Specs

Number Sense:

GLE 1.1.1, 1.1.2, 1.1.3 Understand whole numbers and commutative property

Vocabulary and Terms:

=, amount, digit, even, fewer than, fewest, greater than, greatest, hundreds, in order, less than, more than, most, number, number line, odd, ones, place value, tens, thousands, whole number

Item Characteristics:

	Identify place value to the thousands place
	Represent the place value of digits to the hundreds place
	Explain, identify or show groups of 1s, 10s, and 100s
	Decompose or combine whole numbers based on place value (35 is 3 tens and 5 ones)
	Generate equivalent representations for the same number by decomposing and composing based on addition ($8 + 0$, $5 + 3$)
	Sort, order and compare numbers on a number line
	Explain why a number is greater or less than another number
	Explain the identity or commutative property of addition

GLE 1.1.5 Understand the meaning of multiplication and division

Vocabulary and terms:

addition, altogether, difference, division, equation, multiplication, operation, subtraction, sum, total

Item Characteristics

	Relate addition to subtraction, multiplication to repeated addition, multiplication to division and division to repeated subtraction (fair shares)
	Identify an illustration of addition, subtraction, multiplication, division
	Identify, write, explain fact families
	Use the appropriate operation (+, -, x, ÷) in a given situation
	Convert from words to symbols to show understand of (+, -, x, ÷) in a given situation

GLE 1.1.6 Add and subtract whole numbers

Vocabulary and Terms:

Addition, difference, subtraction, sum

Item Characteristics:

	Add up to 5 one digit numbers and or 2 - two digit numbers
	Subtract with one or two digits
	Complete a two step computation combining addition and subtraction
	Determine the total value of three to five coins (each coin value is given)

GLE 1.1.8 use estimation with addition and subtraction

Vocabulary and Terms:

About how many, closer to, estimate, number line, round, to the nearest

Item Characteristics:

	Identify or explain whether estimation or exact calculation is necessary
	Estimate computation results to the nearest 10, 100 or 1,000 in situations involving addition or subtraction
	Use estimation to determine if an addition or subtraction result is reasonable
	Explain or show a strategy for estimation

Measurement

GLE 1.2.1 Demonstrate understanding of length, perimeter, time, money, weight/mass, capacity and temperature ***Students have to label the units!!!****

Vocabulary and Terms: centimeter, (cm), gram, (g), pound,(lb), attribute, cent, cup, day, degree, (°F), dime, dollar, foot/feet, gallon (gal), high, hour, inch,(in), kilogram, (kg), length, liter, meter, (m), minute, (min) money (\$), month, nickel, ounce, (oz), penny, perimeter, pint, quart, (qt), scale, second, temperature, thermometer, time, ton, unit, weight, wide, yard (yd),

Item Characteristics:

	Identify or describe picture representations of objects using measurable attributes of length, perimeter, time, money, weight/mass, capacity or temperature in US or metric units
	Name parts of an object or event that can be measured
	Explain how money is used to describe the value of an object
	Explain or show how clocks and/or the environment show the passage of time
	Explain or show how measurement attributes can help to compare objects
	Compare objects using words like heavier, wider, shorter when no measurements are available

GLE 1.2.2, 1.2.3 Understand the difference between standard and non standard units of measurements in US or Metric systems

Vocabulary and Terms: same as above

Item Characteristics:

	Describe the benefits of standard units of measurement
	Determine whether standard units are necessary in a situation
	Identify when measurements can or cannot be compared based on the units being the same or different
	Select or describe appropriate units, standard and nonstandard, for measuring length or weight/mass
	Explain how money, capacity, or length units are organized in the US system (Here kids need to know 1 foot = 12 inches, 1 yard = 3 feet, 1 pint = 2 cups, 1 quart = 2 pints, 1 gallon = 4 quarts, \$1 = 100¢etc)
	Convert money, capacity or length within the US system to answer a question

GLE 1.2.4 Understand and apply systematic procedures to measure length, time, weight, money and temperature

Vocabulary and Terms: same as above but add calendar, cup, day, month, week, year

Item Characteristics:

	Determine the appropriate attribute to measure length, time, weight/mass, capacity, and/or temperature in a situation
	Determine whether the appropriate tool has been selected in a situation
	Read the correct measurement from a tool in a given situation
	Identify appropriate measurement procedures and whether it has been done correctly
	Determine the value of each coin or bill and determine the total amount of money
	Use the passage of time to identify or determine an answer to a question

GLE 1.2.6 Identify situations when estimated measurements are sufficient

Vocabulary and Terms: same as above

Item Characteristics:

	Identify a situation when estimating measurement is appropriate
	Use estimation to determine if a given measurement is reasonable
	Describe a procedure for estimating length, perimeter, time, money weight, capacity and time
	Estimate length, perimeter, time, money, weight, capacity or temperature

Geometric Sense

GLE 1.3.1, 1.3.2 Understand congruence, use geometric attributes to identify, name, draw, compare, and/or sort 2D figures

Vocabulary and Terms:

Angle, attribute, circle, closed, line, open, rectangle, side, sort, square, triangle (congruent could be used with examples or definitions)

Item Characteristics:

	Identify a figure that is congruent to a given figure
	Identify whether 2 figures are congruent and explain why
	Identify and draw 2D figures having certain attributes and properties
	Describe 2D figures having certain attributes and properties
	Compare and sort 2D figures according to their attributes or properties
	Describe how to draw a given figure based on its properties

GLE 1.3.3 describe the locations of points on a number line

Vocabulary and Terms:

Above, below, beside, circle, intersect, left, line, line segment, number line, point, rectangle, right, square, triangle

Item Characteristics:

	Use numbers to identify or describe the location of points on a number line
	Identify or describe the relative location - left, right, above, below, number of spaces apart - of points or objects on a number line
	Draw points on a number line
	Identify the final location of an object based on given movement on a number line
	Decide whether an object is above, below or on a given value on a number line

Probability and Statistics (Probability not measured at grade 3)

GLE 1.4.3, 1.4.4 demonstrate understanding of how to ask questions to get needed data and the mode for a set of data Students will use tables, charts, pictographs and bar graphs

Vocabulary and Terms:

data, survey, mode can be used but will be with the example most common or most common number

Item Characteristics:

	Identify or write appropriate questions to gather data about themselves or others
	Identify the mode for a set of data
	Explain why the mode is useful for describing data

GLE 1.4.5 read data from tables, charts, pictographs and bar graphs

Vocabulary and Terms:

Bar graph, describe, fewer than, fewest, graph, graph paper, greatest, least, less than, more than, most, pattern, pictograph, summary

Item Characteristics:

	Read data from tables, charts, pictographs or bar graphs
	Describe or explain data
	Compare data points
	Summarize the data presented
	Explain whether the title and/or labels are accurate and appropriate for the given data

Algebraic Sense

GLE 1.5.1 recognize and extend patterns of shapes and/or objects or patterns of numbers that use on arithmetic operation - addition or subtraction - to move from one term to another

Vocabulary and Terms:

Number pattern, pattern (function will be used with a definition)

Item Characteristics:

	Identify a pattern that fits a given rule
	Extend a pattern by identifying or supplying missing elements in the beginning, middle or end of the pattern
	Represent a number pattern using standard notation or symbols

GLE 1.5.3, 1.5.4 demonstrate understanding of equality and use = in equations; use variables to write simple expressions and equations that represent situations that involve addition and subtraction

Vocabulary and Terms:

=, equal, equation, expression, pattern, rule

Item Characteristics:

	Write or identify an expression or equation to represent a situation involving addition or subtraction
	Identify or describe a situations that represents a given expression or equation involving addition or subtraction
	Identify or write a rule for a pattern or function based on a single arithmetic operation using addition or subtraction
	Determine whether two expressions are equal
	Describe a situation in which two expressions are equal

GLE 1.5.6 solve simple equations with addition and subtraction using manipulatives, pictures, and/or symbols

Vocabulary and Terms: =, equal, equation, expression

Item Characteristics:

	Solve a simple equation in a given situation using addition or subtraction (could be given a box, variable or symbol to solve for the unknown)
	Write and solve simple equations for a given situation using addition or subtraction
	Draw a picture to demonstrate the meaning of a solution to an equation

Process Strands

Process strand 6: Solves Problems and Reasons Logically (all content strand vocabulary applies)

GLE 2.1.1, 2.1.2, 2.1.3

	Identify what information is relevant, what is missing or unnecessary to solve a given situation
	Clarify the purpose of a problem or identify the question the situation presents
	Formulate or identify additional questions that need to be answered in order to find a solution to a given problem
	Identify the "known" and "unknown" information in a given problem

GLE 2.2.1, 2.2.2, 2.2.3, 2.2.4

	Select and organize relevant information,
	Use appropriate concepts and procedures from number sense, measurement, geometry and statistics
	Use a variety of strategies and approaches
	Determine whether a solution is viable, correct and answers the question asked

GLE 3.1.1

	Interpret mathematics information or results
	Compare mathematics information in tables, charts, pictographs, bar graphs or text maps, diagrams, 2D figures or data in order to answer a question
	Identify agreement or differences between math information, diagrams or representations
	Make predictions about the outcomes of simple situations using the terms more, less, all, or none

Process Strand 7 Communicates Understanding

GLE 4.1.2

	Extract mathematical information from various sources such as pictures, symbols, text, tables, charts, graphs, diagrams and models for a purpose
	Write questions that could be answered using data sources such as magazines, newspapers, menus, sales and travel brochures, TV and bus schedules, sales receipts

GLE 4.2.1, 4.2.2, 4.2.3

	Clearly organize math data in a useful format for a given purpose
	Represent math information in pictures, tables, charts, tables, charts, pictographs, bar graphs, drawings etc. and <u>to include</u> titles, labels, and accurate data display
	Clearly explain or describe math ideas in a way that is appropriate for a given purpose using math language and notation

Process Strand 8 Makes Connections

GLE 5.1.1, 5.1.2

	Use concepts and procedures from two different strands - number, measurement, geometry, statistics, algebra
	Identify which of three math models or representations is equivalent to a given model or representation