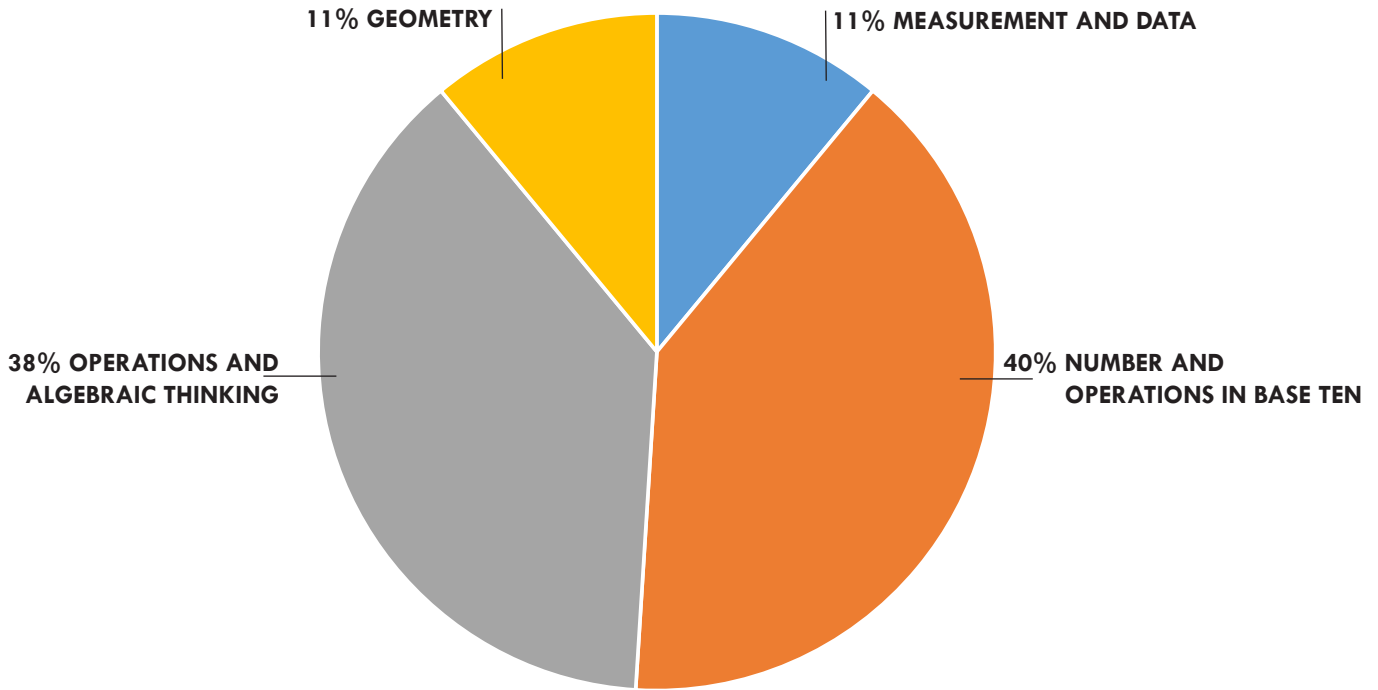




TABE TEST MATHEMATICS BLUEPRINT OVERVIEW



NUMBER AND OPERATIONS IN BASE TEN (40%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	1.NBT.2	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: (1.NBT.2.a, 1.NBT.2.b, 1.NBT.2.c)	A	High
	1.NBT.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.	A	High
	1.NBT.4	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	A	Low
	1.NBT.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	A	Medium
	1.NBT.6	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	A	Medium

OPERATIONS AND ALGEBRAIC THINKING (38%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	1.OA.2	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	A	Low
	1.OA.3	Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)	A	High
	1.OA.4	Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.	A	Medium
	1.OA.5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	A	Low
	1.OA.6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).	A	Medium
	1.OA.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.	A	High
	1.OA.8	Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = [\text{box}] - 3$, $6 + 6 = [\text{box}]$.	A	Low

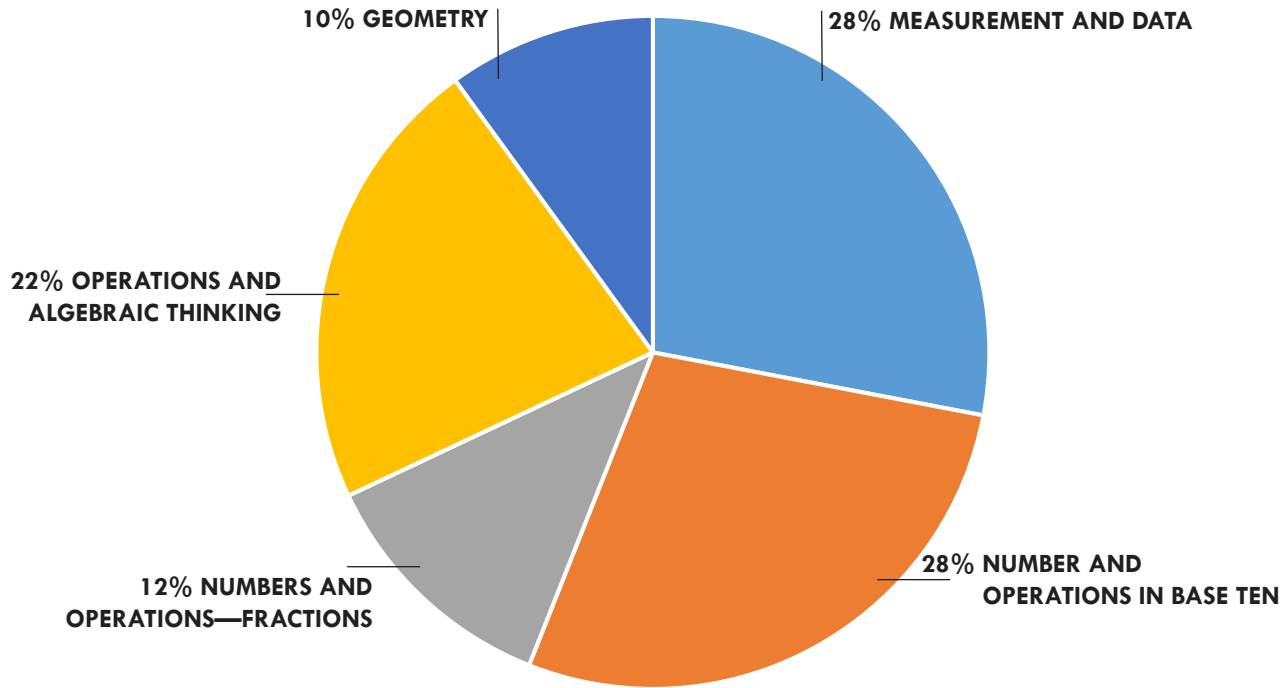
Geometry (11%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	1.G.2	Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	A	Medium
K.G.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.K.G., number of sides and vertices/corners) and other attributes (e.K.G., having sides of equal length).	A	Medium	

MEASUREMENT AND DATA (11%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	1.MD.2	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	A	Low
1.MD.4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	A	High	

TABE TEST MATHEMATICS BLUEPRINT OVERVIEW **LEVEL L**



TABE TEST MATHEMATICS BLUEPRINT OVERVIEW



NUMBER AND OPERATIONS IN BASE TEN (28%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	2.NBT.1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: (2.NBT.1.a, 2.NBT.1.b)	B	Low
	3.NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100.	B	Medium
	2.NBT.2	Count within 1000; skip-count by 5s, 10s, and 100s.	B	Medium
	3.NBT.2	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	B	Low
	2.NBT.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	B	Low
	3.NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10 - 90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	B	Medium
	2.NBT.4	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.	B	Medium
	2.NBT.6	Add up to four two-digit numbers using strategies based on place value and properties of operations.	B	Medium
	2.NBT.7	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	B	Medium

NUMBER AND OPERATIONS —FRACTIONS (12%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	3.NF.1	Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.	B	Medium
	3.NF.2	Understand a fraction as a number on the number line; represent fractions on a number line diagram. (3.NF.2.a, 3.NF.2.b)	B	Medium
	3.NF.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. (3.NF.3.a, 3.NF.3.b, 3.NF.3.c, 3.NF.3.d)	B	High

OPERATIONS AND ALGEBRAIC THINKING (22%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	2.OA.1	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., by using drawings and equations with a symbol for the unknown number to represent the problem.	B	Medium
	3.OA.1	Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .	B	Medium
	3.OA.2	Interpret whole-number quotients of whole numbers, e.g., interpret $56/8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56/8$.	B	Low
	3.OA.3	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	B	Low
	3.OA.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \boxed{}/3$, $6 \times 6 = ?$.	B	Low
	3.OA.5	Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)	B	Low
	3.OA.6	Understand division as an unknown-factor problem. For example, find $32/8$ by finding the number that makes 32 when multiplied by 8.	B	Medium
	3.OA.7	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40/5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	B	Low
	3.OA.8	Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	B	Medium
3.OA.9	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	B	Low	

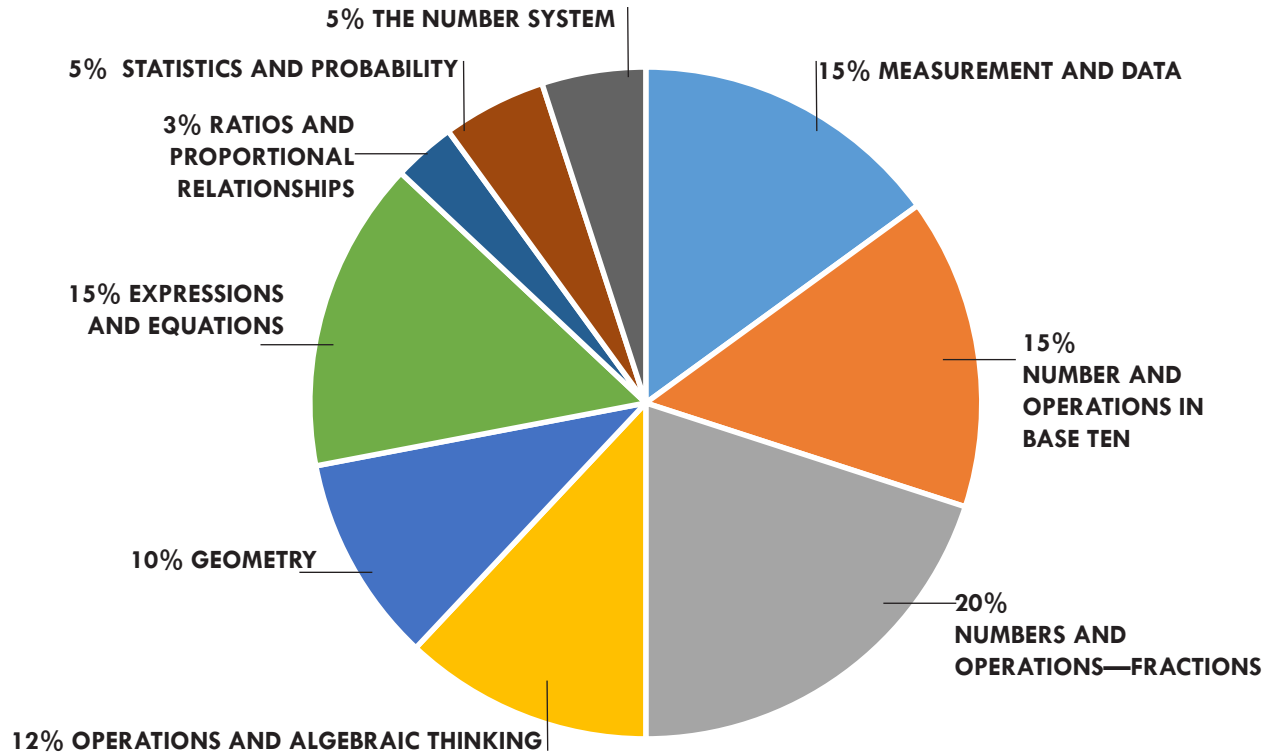
TABE TEST MATHEMATICS BLUEPRINT OVERVIEW **LEVEL E**

GEOMETRY (10%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	2.G.1	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	B	Medium
	3.G.1	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	B	Medium
	3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.	B	Low
	2.G.3	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	B	Low

MEASUREMENT AND DATA (28%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	3.MD.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	B	Medium
	2.MD.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	B	Low
	3.MD.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	B	Medium
	2.MD.3	Estimate lengths using units of inches, feet, centimeters, and meters.	B	Low
	3.MD.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step how many more and how many less problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	B	Low
	2.MD.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	B	Low
	3.MD.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units - whole numbers, halves, or quarters.	B	Low
	3.MD.5	Recognize area as an attribute of plane figures and understand concepts of area measurement. (3.MD.5.b)	B	Low
	2.MD.6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	B	Low
	3.MD.7	Relate area to the operations of multiplication and addition. (3.MD.7.a, 3.MD.7.b, 3.MD.7.c, 3.MD.7.d)	B	High
	3.MD.8	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	B	Medium
	2.MD.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.	B	Low



TABE TEST MATHEMATICS BLUEPRINT OVERVIEW



	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
MEASUREMENT AND DATA (15%)	5.MD.1	Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	C	Medium
	5.MD.2	Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	C	Low
	5.MD.4	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	C	Low
	4.MD.5	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: (5.MD.5.b)	C	Low
	5.MD.5	Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. (5.MD.5.a, 5.MD.5.b, 5.MD.5.c)	C	Medium
	4.MD.6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	C	Medium
	4.MD.7	Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	C	Medium

NUMBER AND OPERATIONS—FRACTIONS (20%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	4.NF.1	Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	C	Low
	5.NF.2	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.	C	Low
	4.NF.3	Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. (4.NF.3.a, 4.NF.3.b, 4.NF.3.c, 4.NF.3.d)	C	Medium
	5.NF.3	Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	C	Low
	4.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. (4.NF.4.a, 4.NF.4.b, 4.NF.4.c)	C	Medium
	5.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	C	Medium
	5.NF.5	Interpret multiplication as scaling (resizing), by: (5.NF.5.b)	C	Low
	5.NF.6	Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	C	Low
	4.NF.7	Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.	C	Medium
5.NF.7	Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (5.NF.7.a, 5.NF.7.b, 5.NF.7.c)	C	Medium	

STATISTICS & PROBABILITY (5%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	6.SP.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, How old am I? is not a statistical question, but How old are the students in my school? is a statistical question because one anticipates variability in students' ages.	C	Medium
	6.SP.2	Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	C	Low
	6.SP.4	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	C	Low

NUMBER AND OPERATIONS IN BASE TEN (15%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	4.NBT.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.	C	Medium
	4.NBT.3	Use place value understanding to round multi-digit whole numbers to any place.	C	Low
	5.NBT.3	Read, write, and compare decimals to thousandths. (5.NBT.3.a, 5.NBT.3.b)	C	Medium
	4.NBT.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.	C	Low
	5.NBT.4	Use place value understanding to round decimals to any place.	C	Low
	4.NBT.5	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	C	Low
	5.NBT.5	Fluently multiply multi-digit whole numbers using the standard algorithm.	C	Low
	4.NBT.6	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	C	Low
	5.NBT.7	Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	C	Low

OPERATIONS AND ALGEBRAIC THINKING (10%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	4.OA.1	Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	C	Medium
	5.OA.1	Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	C	Low
	4.OA.2	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	C	Medium
	4.OA.3	Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	C	Low
	4.OA.4	Find all factor pairs for a whole number in the range 1 - 100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1 - 100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1 - 100 is prime or composite.	C	Low
	4.OA.5	Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule Add 3 and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.	C	Low

GEOMETRY (10%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	4.G.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	C	Medium
	5.G.1	Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.5.G., x-axis and x-coordinate, y-axis and y-coordinate).	C	Low
	5.G.3	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	C	Low
	6.G.4	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	C	Low

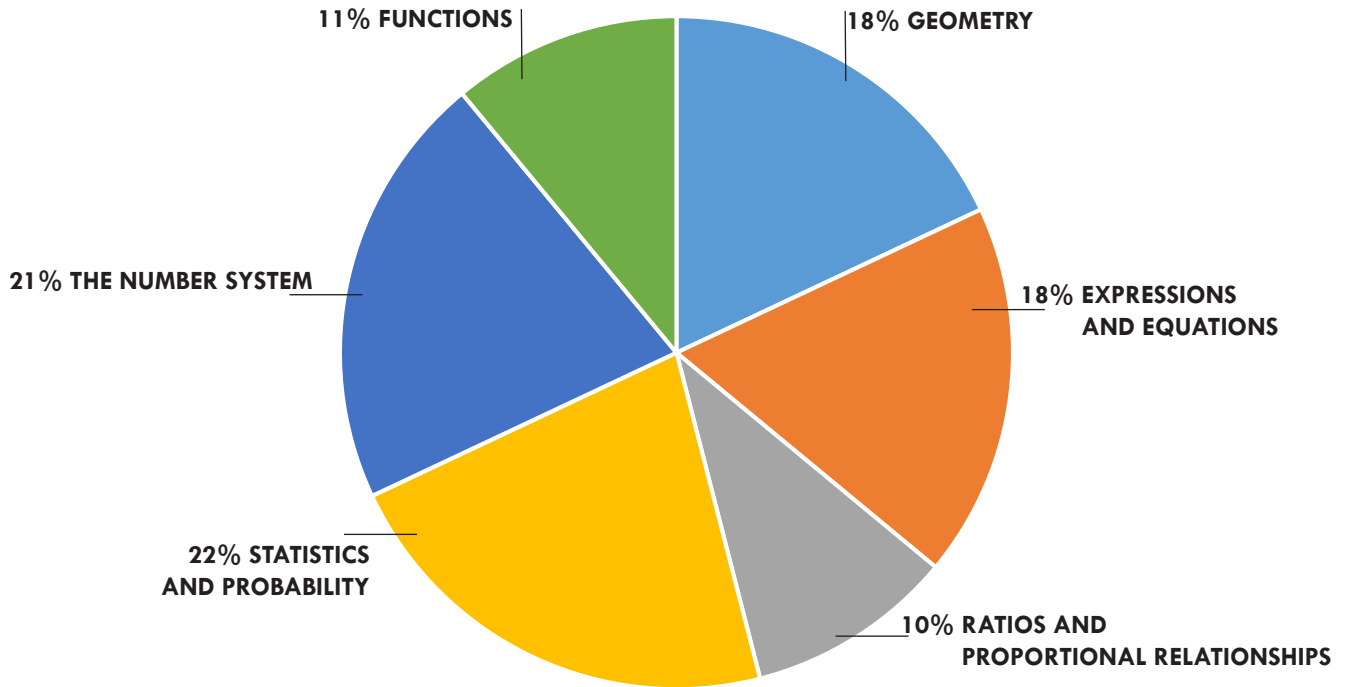
EXPRESSIONS AND EQUATIONS (15%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	6.EE.7	Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers.	C	Low
	6.EE.8	Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	C	Low
	6.EE.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	C	Low
	6.EE.2	Write, read, and evaluate expressions in which letters stand for numbers.(6.EE.2.a, 6.EE.2.b, 6.EE.2.c)	C	Low
	6.EE.3	Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.	C	Low
	6.EE.4	Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.	C	Low
	6.EE.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	C	Low
	6.EE.6	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	C	Low

RATIOS & PROPORTIONAL RELATIONSHIPS (3%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	6.RP.2	Understand the concept of a unit rate a/b associated with a ratio $a:b$ with b not equal to 0, and use rate language in the context of a ratio relationship. For example, This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar. We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.	C	Medium

THE NUMBER SYSTEM (5%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	6.NS.1	Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?	C	Low
	6.NS.2	Fluently divide multi-digit numbers using the standard algorithm	C	Medium
	6.NS.4	Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1 - 100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$.	C	Low



TABE TEST MATHEMATICS BLUEPRINT OVERVIEW



	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
GEOMETRY (15%)	7.G.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	D	Low
	8.G.2	Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	D	Medium
	7.G.4	Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	D	Low
	8.G.4	Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	D	Low
	7.G.5	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	D	Low
	7.G.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	D	Low
	8.G.7	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	D	Low
	8.G.8	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	D	Low

EXPRESSIONS AND EQUATIONS (18%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	8.EE.1	Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} = 3^{-3} = 1 \div 3^3 = 1/27$.	D	Low
	7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, $a + 0.05a = 1.05a$ means that increase by 5% is the same as multiply by 1.05.	D	Low
	8.EE.2	Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.	D	Medium
	7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $1/10$ of her salary an hour, or \$2.50, for a new salary of \$250. If you want to place a towel bar $9 \frac{3}{4}$ inches long in the center of a door that is $27 \frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.	D	Low
	8.EE.3	Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9 , and determine that the world population is more than 20 times larger.	D	Low
	7.EE.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. (7.EE.4a, 7.EE.4b)	D	High
	8.EE.5	Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	D	Low
	8.EE.8	Analyze and solve pairs of simultaneous linear equations. (8.EE.8.a, 8.EE.8.b, 8.EE.8.c)	D	Low

RATIOS AND PROPORTIONAL RELATIONSHIPS (10%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	7.RP.1	Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $1/2$ mile in each $1/4$ hour, compute the unit rate as the complex fraction $1/2 \div 1/4$ miles per hour, equivalently 2 miles per hour.	D	Low
	7.RP.2	Recognize and represent proportional relationships between quantities. (7.RP.2.a, 7.RP.2.b, 7.RP.2.c, 7.RP.2.d)	D	High
	6.RP.3	Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. (6.RP.3a, 6.RP.3.b, 6.RP.3.c, 6.RP.3.d)	D	Medium
7.RP.3	Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.	D	Low	

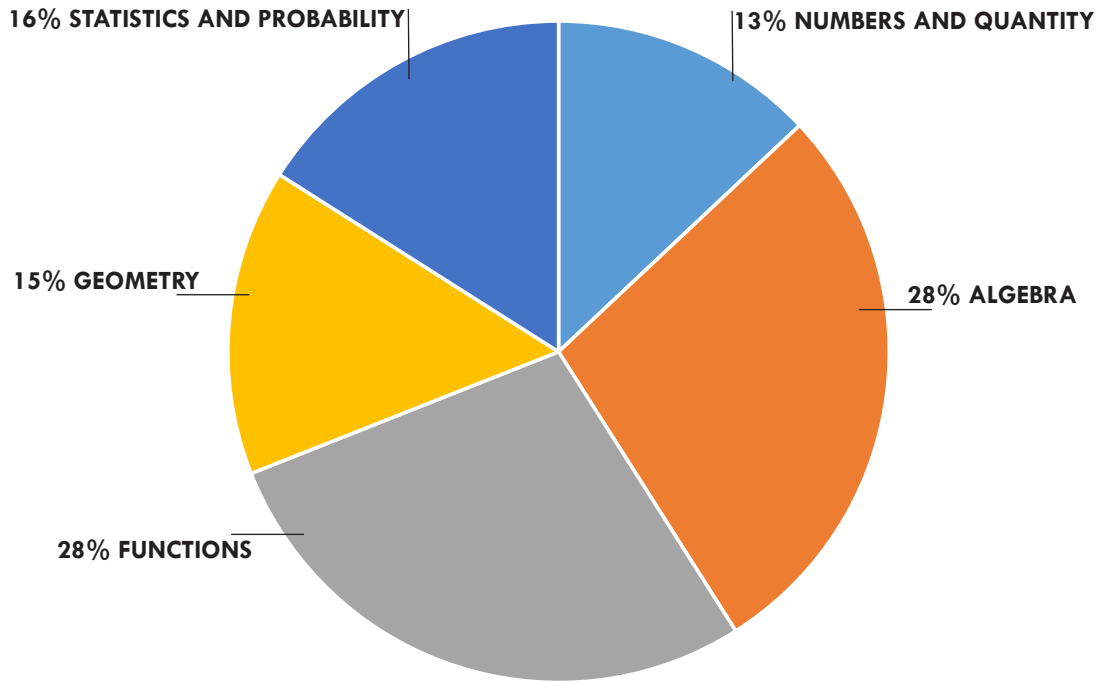
STATISTICS AND PROBABILITY (22%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	8.SP.1	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	D	Low
	7.SP.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.	D	Low
	8.SP.2	Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	D	Low
	8.SP.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.	D	Low
	7.SP.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book	D	Medium
	8.SP.4	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?	D	Low
	6.SP.5	Summarize numerical data sets in relation to their context, such as by: (6.RP.5.d)	D	Low
	7.SP.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	D	Medium
	7.SP.7	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. (7.SP.7.a, 7.SP.7.b)	D	Low
7.SP.8	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. (7.SP.8.a, 7.SP.8.b)	D	Medium	

THE NUMBER SYSTEM (21%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	6.NS.5	Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	D	Medium
	6.NS.6	Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. (6.NS.6.a, 6.NS.6.b, 6.NS.6.c)	D	Medium
	6.NS.7	Understand ordering and absolute value of rational numbers. (6.NS.7.a, 6.NS.7.b, 6.NS.7.c, 6.NS.7.d)	D	Medium
	6.NS.8	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	D	Low
	7.NS.1	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. (7.NS.1.a, 7.NS.1.b, 7.NS.1.c, 7.NS.1.d)	D	High
	7.NS.2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. (7.NS.2.a, 7.NS.2.b, 7.NS.2.c, 7.NS.2.d)	D	Medium
	8.NS.2	Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.	D	Low

FUNCTIONS (11%)	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	8.F.3	Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.	D	Low
	8.F.4	Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	D	Medium
	8.F.5	Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	D	High



TABE TEST MATHEMATICS BLUEPRINT OVERVIEW



	DOMAIN	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
GEOMETRY (15%)	G.CO: Congruence	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	E	Low
	G.SRT: Similarity, Right Triangles, and Trigonometry	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	E	Medium
	G.GMD: Geometric Measurement and Dimension	G.GMD.3	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	E	High
	G.MG: Modeling with Geometry	G.MG.2	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	E	Medium

NUMBERS AND QUANTITY (13%)	DOMAIN	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL	
	N.RN: The Real Number System	N.RN.2	Rewrite expressions involving radicals and rational exponents using the properties of exponents.	E	Medium	
		N.Q: Quantities	N.Q.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	E	High
			N.Q.3	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	E	Low

ALGEBRA (28%)	DOMAIN	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	A.SSE: Seeing Structure in Expressions	A.SSE.1a	Interpret parts of an expression, such as terms, factors, and coefficients.	E	Low
		A.SSE.2	Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.	E	Low
		A.SSE.3a	Factor a quadratic expression to reveal the zeroes of the function it defines.	E	Low
	A.APR: Arithmetic with Polynomials and Rational Expressions	A.APR.1	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add subtract, and multiply polynomials.	E	Medium
	A.CED: Creating Equations	A.CED.1	Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.	E	Low
		A.CED.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	E	Low
		A.CED.3	Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.	E	Medium
	A.REI: Reasoning with Equations and Inequalities	A.REI.1	Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.	E	Low
		A.REI.3	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	E	Low
A.REI.4		Solve quadratic equations in one variable.	E	Low	
A.REI.6		Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	E	Medium	
A.REI.10		Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).	E	High	

FUNCTIONS (28%)	DOMAIN	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	F.IF: Interpreting Functions	F.IF.1	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x . The graph of f is the graph of the equation $y = f(x)$.	E	Low
		F.IF.2	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	E	Medium
		F.IF.4	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. For example, for a quadratic function modeling a projectile in motion, interpret the intercepts and the vertex of the function in the context of the problem.	E	Medium
		F.IF.6	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.	E	Medium
		F.IF.7	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.	E	High
		F.IF.8b	Use properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in an exponential function and then classify it as representing exponential growth or decay.	E	Low
		F.IF.9	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.	E	Low
	F.BF: Building Functions	F.BF.1	Write a function that describes a relationship between two quantities.	E	Low
	F.LE: Linear, Quadratic, and Exponential Models	F.LE.1c	Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	E	Low
F.LE.5		Interpret the parameters in a linear or exponential function in terms of a context.	E	Low	

STATISTICS AND PROBABILITY (16%)	DOMAIN	STANDARD	STANDARD DESCRIPTION	AE-CCR LEVEL	TABE 11/12 EMPHASIS LEVEL
	S.ID: Interpreting Categorical and Quantitative Data	S.ID.1	Represent data with plots on the real number line (dot plots, histograms, and box plots).	E	Medium
		S.ID.3	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	E	Medium
		S.ID.5	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.	E	Medium
		S.ID.7	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	E	Medium
		S.ID.9	Distinguish between correlation and causation.	E	Low

TABE TEST MATHEMATICS BLUEPRINT OVERVIEW **LEVEL A**