Level C CCRS Checklist Math

Name_____

Number Sense		
Generalize place value understanding for multi-digit whole numbers.		**TABE M**
Date of Mastery		
	Recognize that in a multi-digit whole number, a digit in one place represents 10 time what it represents in the place to the right (4.NBT.1)	**34**
	Read and write multi-digit numbers using base-ten numerals, number names, and expanded form and compare using >, <, or = (4.NBT.2)	
	Use place value understanding to round multi-digit whole numbers to any place (4.NBT.3)	**15, 36**
Use place value understanding and properties of operations to perform multi-digit arithmetic.		
	Fluently add and subtract multi-digit whole numbers using the standard algorithm (4.NBT.4)	33
	Multiply a 4 digit whole number by a 1 digit number and two 2 digit numbers using equations, rectangular arrays, and/or area models (4.NBT.5)	
	Divide a 4 digit whole number by a 1 digit number using equations, rectangular arrays and/or area models (4.NBT.6)	
Understand the place value system.		
	Recognize that in a multi-digit whole number, a digit in one place represents 10 time what it represents in the place to the right and 1/10 in the place to its left (5.NBT.1)	36
	Explain patterns in the number of zeros of the product when multiply by a power of 10, and patterns in decimal location when multiplied or divided by powers of 10 (5.NBT.2)	
	Read, write and compare decimals to the thousandths (5.NBT.3)*	13, 16, 27 **14, 28**
	Use place value understanding to round decimals to any place (5.NBT.4)	
Perform operations with multi-digit whole numbers and with decimals to hundredths.		
	Fluently multiply multi-digit whole numbers using the standard algorithm (5.NBT.5)	10 **10**
	Find whole number quotients of 4 digit dividends and 2 digit divisors (5.NBT.6)	31 **4**
	Use all 4 operations on decimals to the hundredths, application should involve financial lit. (5.NBT.7)	**30, 33**
Compute fluently with multi-digit numbers and find common factors and multiples.		
	Fluently divide multi-digit numbers using the standard algorithm (6.NS.2)	17
	Fluently add, subtract, multiply and divide multi-digit decimals using standard algorithms (6.NS.3)	
	Find the GCF of two whole numbers within 100 and LCM of two numbers within 12. Use distributive property to express a sum of two whole numbers 1-100 with a common factor (36+8=4(9+2)) (6.NS.4)	6
Extend understanding of fraction equivalence and ordering.		
	Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b), recognize and generate equivalent fractions (4.NF.1)	20, 39
	Compare two fractions with different numerators and different denominators by creating common denominators or numerators using >, < , or = (4.NF.2)	
Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.		
	Understand a fraction a/b with a > 1 as a sum of fractions 1/b (4.NF.3)*	25
	Multiply a fraction by a whole number. (4.NF.4)*	12 **1**
Understand decimal notation for fractions, and compare decimal fractions.		
	Use decimal notation for fractions with denominators 10 or 100 (rewrite 0.62 as 62/100) (4.NF.6)	
Use equivalent fractions as strategy to add and subtract fractions.		

*See sub-standards in CCRS book

TABE 11 in Regular Print

TABE 12 in **Bold**

Test Answers may be found in more than one category on the checklist.

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	Add and subtract fractions with unlike denominators (including mixed numbers) by finding LCD (5.NF.1)	14
	Solve word problems with addition and subtraction of fractions, including unlike denominators use benchmark fractions and number sense of fractions to assess reasonableness of answers (5.NF.2)	**21, 22**
Apply and extend previous understanding of multiplication and division to multiply and divide fractions.		
	Interpret a fraction as division of the numerator by the denominator (5.NF.3)	
	Multiply a fraction or whole number by a fraction. (5.NF.4)	**2, 3, 9**
	Interpret multiplication as scaling (resizing) (5.NF.5)*	9
	Solve real world problems involving multiplication of fractions and mixed numbers (5.NF.6)	
	Divide unit fractions by whole numbers and whole numbers by unit fractions. (5.NF.7)*	4 **17, 18**
Apply and extend previous understandings of multiplication and division to divide fractions by fractions.		
	Compute quotients of fractions, and solve word problems of division of fractions by fractions (6.NS.1)	
Understand ratio concepts and use ratio reasoning to solve problems.		
	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities (6.RP.1)	
	Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 0, and use rate language in the context of a ratio relationship (6.RP.2)	35 **35**
Algebra		
Use the four operations with whole numbers to solve problems.		
	Interpret a multiplication equation as a comparison (35 = 5 × 7 is a statement 35 is 5 times as many as 7) (4.OA.1)	3, 7 **11**
	Multiply or divide to solve word problems involving multiplicative comparison (4.OA.2)	
	Solve multistep word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess reasonableness of answer (4.OA.3)	**39B**
Gain familiarity with factors and multiples.		
	Find all factor pairs for a whole number in the range 1–100. Determine whether a number is a prime or composite number (4.OA.4)	23A, 23B
Generate and analyze patterns.		
	Generate a number or shape pattern that follows a given rule (4.OA.5)	1 **38**
Write and interpret numerical expressions.		
	Use parentheses, brackets, or braces in expressions, and evaluate these expressions (5.OA.1)	5 **6**
	Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them (add 8 and 7, then multiply by 2" as 2 × (8 + 7)) (5.OA.2)	**5**
Apply and extend previous understandings of arithmetic to algebraic expressions.		
	Write and evaluate numerical expressions involving whole-number exponents. (6.EE.1)	**26**
	Write, read, and evaluate expressions in which letters stand for numbers. (6.EE.2)*	11 **16A, 16B, 39A**
	Apply the properties of operations to generate equivalent expressions. (6.EE.3)	15, 30, 37 **8A, 8B**

*See sub-standards in CCRS book TABE 11 in Regular Print Test Answers may be found in more

Checklist created by Kerin Hanson with Bemidji ABE TABE 12 in **Bold** than one category on the checklist.

	Identify when two expressions are equivalent (6.EE.4)	**19**
Reason about and solve one-variable equations and inequalities.		
	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? (6.EE.5)	
	Use variables to represent numbers and write expressions to solve real-world or math problems (6.EE.6)	38
	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. (6.EE.7)	**37**
	Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem (6.EE.8)	
Represent and analyze quantitative relationships between dependent and independent variables.		
	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 using tables or graphs (6.EE.9)	
Geometry		
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.		
	Draw points, lines, line segments, rays, angles, and perpendicular and parallel lines. Identify these in 2D figures. (4.G.1)	19, 28
Graph points on the coordinate plane to solve real-world and mathematical problems.		
	Use a pair of perpendicular number lines, called axes, to define a coordinate system (5.G.1)	
	Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. (5.G.2)	2, 8 **7**
Classify two-dimensional figures into categories based on their properties.		
	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category (Rectangles have 4 right angles, so squares also have 4 right angles) (5.G.3)	**23A, 23B**
Solve real-world and mathematical problems involving area, surface area, and volume.		
	Find the area of right triangles, other triangles, special quadrilaterals, and polygons (6.G.1)	
	Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. (6.G.3)	
	Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. (6.G.4)	**20**
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.		
	Use the 4 operations to solve word problems with distance, time intervals, liquid volumes, mass, and money include fractions, decimals, and measurements. (4.MD.2)	32
	Apply the area and perimeter formulas for rectangles in real world and mathematical problems. (4.MD.3)	40 **2, 3, 13**
Geometric measurement: understand concepts of angle and measure angles.		
	Recognize angles as geometric shapes that are formed when two rays share a common endpoint and understand concepts of angle measurement (4.MD.5)*	**29, 31**
	Measure angles in whole-number degrees and sketch angles using a protractor (4.MD.6)	18 **27**
	Recognize angle measure as additive. Solve addition and subtraction to find unknown angles (4.MD.7)	34 **25**

Convert like measurement units within a given measurement system.		
	Convert among different standard measurement units and solve multi-step real world problems (5.MD.1)	**24**
Represent and interpret data.		
	Make a line plot to display data measured in fractional units (5.MD.2)	
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.		
	Recognize volume as an attribute of solid figures and understand concept of volume (5.MD.3)*	
	Measure volumes by counting unit cubes (cm^3, in^3, ft^3, etc.) (5.MD.4)	21, 24
	Relate volume to operations of multiplication and addition to solve real world and mathematical problems involving volume (5.MD.5)*	26
Statistics and Probability		
Develop understanding of statistical variability.		
	Recognize a statistical question, anticipating variability in the data related to the question (6.SP.1)	22 **12**
	Understand a set of data has a distribution that can be described by center, spread, and shape (6.SP.2)	29
	Recognize a measure of center as a single number that summarizes a data set, while a measure of variation describes how values vary with a single number (6.SP.3)	
Summarize and describe distributions		
	Display numerical data in plots on a number line (dot plot, histogram, and box plot) (6.SP.4)	**32, 40**