Student: _____ **Year:** _____

Teacher: _____

**Indicates not taught this 9 weeks*

Fourth Grade Math Checklist	1st 9 Weeks	2nd 9 Weeks	3rd 9 Weeks	4th 9 Weeks
Number and Operations				
M4N1: Students will further develop their understanding of how whole numbers and decimals are represented in the base-ten system.				
a. Identify place value names and places from hundredths through one million.				
b. Equate a number's word name, its standard form, and its expanded form.				
M4N2: Students will understand and apply the concept of rounding numbers.				
a. Round numbers to the nearest ten, hundred, and thousand.				
b. Describe situations in which rounding numbers would be appropriate and determine whether to round to the nearest ten, hundred, and thousand.				
c. Determine to which whole number or tenth a given decimal is closest using tools such as a number line, and/or charts.				
d. Round a decimal to the nearest whole number or tenth.				
e. Represent the results of computation as a rounded number when appropriate and estimate a sum or difference by rounding numbers.				
M4N3: Students will solve problems involving multiplication of 2-3 digit numbers by 1 or 2 digit numbers.	*			
M4N4: Students will further develop their understanding of division of whole numbers and divide in problem solving situations without calculators.				
a. Know the division facts with understanding and fluency.	*			
b. Solve problems involving division by 1 or 2 digit numbers (including those that generate a remainder).	*			
c. Understand the relationship between dividend, divisor, quotient, and remainder.	*			
d. Understand and explain the effect on the quotient of multiplying or dividing both the divisor and dividend by the same number .	*			
M4N5: Students will further develop their understanding of the meaning of decimals and use them in computation.				
a. Understand decimals are a part of the base-ten system.	*	*	*	
b. Understand the relative size of numbers and order two digit decimals.	*	*	*	
c. Add and subtract both one and two digit decimals.	*	*	*	
d. Model multiplication and division of decimals by whole numbers.	*	*	*	
M4N6: Students will further develop their understanding of the meaning of decimal fractions and common fractions and use them in computation.				
a. Understand representations of equivalent common fractions and/or decimal fractions.	*	*		
b. Add and subtract fractions and mixed numbers with like denominators.	*	*		
c. Use mixed numbers and improper fractions interchangeably.	*	*		
M4N7: Students will explain and use properties of the four arithmetic operations to solve and check problems.				
a. Describe situations in which the four operations may be used and the relationship among them.				
b. Compute using the order of operations, including parentheses.				
c. Compute using the commutative, associative, and distributive properties.				
d. Use mental math and estimation strategies to compute.				
Measurement				
M4M1: Students will understand the concept of weight and how to measure weight.				
a. Use standard and metric units to measure the weight of objects.	*			
b. Know units used to measure weight (gram, kilogram, ounces, pound, and tons).	*			
c. Compare one unit to another within a single system of measurement.	*			
M4M2: Students will understand the concept of angles and how to measure them.				
a. Use tools, such as a protractor or angle ruler, and other methods such as paper folding, drawing a diagonal in a square, to measure angles.	*	*		
b. Understand the meaning and measure of a half rotation (180°) and a full rotation (360°).	*	*		
c. Determine that the sum of the three angles of a triangle is always 180°.	*	*		
Geometry				
M4G1: Students will define and identify the characteristics of geometric figures through examination and construction.				
a. Examine and compare angles in order to classify and identify triangles by their angles.	*	*		
b. Describe parallel and perpendicular lines in plane geometric figures.	*	*		
c. Examine and classify quadrilaterals (including parallelograms, squares, rectangles, trapezoids, and rhombi) by their properties.	*	*		

d. Compare and contrast the relationships among quadrilaterals.	*	*		
M4G2: Students will understand fundamental solid figures.				
a. Compare and contrast a cube and a rectangular prism in terms of number and shape of their faces, edges, and vertices.	*	*		
b. Describe parallel and perpendicular lines and planes in connection with the rectangular prism.	*	*		
c. Build/collect models for solid geometric figures (cubes, prisms, cylinders, pyramids, spheres, and cones) using nets and other representations.	*	*		

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Fourth Grade Math Checklist	1st 9 Weeks	2nd 9 Weeks	3rd 9 Weeks	4th 9 Weeks
Geometry (continued)				
M4G3: Students will use the coordinate system.				
a. Understand and apply ordered pairs in the first quadrant of the coordinate system.				
b. Locate a point in the first quadrant in the coordinate plane and name an ordered pair.				
c. Graph ordered pairs in the first quadrant.				
Algebra				
M4A1: Students will represent and interpret mathematical relationships between quantities using mathematical expressions in problem-solving situations.				
a. Understand and apply patterns and rules to describe relationships and solve problems.				
b. Represent unknowns using symbols.	*			
c. Write and evaluate mathematical expressions using symbols and different values.				
Data Analysis and Probability				
M4D1: Students will gather, organize, and display data according to the situation and compare related features.				
a. Construct and interpret line graphs, line plot graphs, pictographs, Venn diagrams, and bar graphs.				
b. Investigate the features and tendencies of graphs.				
c. Compare different graphical representations for a given set of data.				
d. Identify missing information and duplications in data.				
e. Determine and justify the range, mode, and median of a set of data.				
f. Multiply and divide both one and two digit decimals by whole numbers.	*	*	*	
Process Skills				
M4P1: Students will solve problems (using appropriate technology).				
a. Build new mathematical knowledge through problem solving.				
b. Solve problems that arise in mathematics and in other contexts.				
c. Apply and adapt a variety of appropriate strategies to solve problems.				
d. Monitor and reflect on the process of mathematical problem solving.				
M4P2: Students will reason and evaluate mathematical arguments.				
a. Recognize reasoning and proof as fundamental aspects of mathematics.				
b. Make and investigate mathematical conjectures.				
c. Develop and evaluate mathematical arguments and proofs.				
d. Select and use various types of reasoning and methods of proof.				
M4P3: Students will communicate mathematically.				
a. Organize and consolidate their mathematical thinking through communication.				
b. Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.				
c. Analyze and evaluate the mathematical thinking and strategies of others.				
d. Use the language of mathematics to express mathematical ideas precisely.				
M4P4: Students will make connections among mathematical ideas and to other disciplines.				
a. Recognize and use connections among mathematical ideas.				
b. Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.				
c. Recognize and apply mathematics in contexts outside of mathematics.				
M4P5: Students will represent mathematics in multiple ways.				
a. Create and use representations to organize, record, and communicate mathematical ideas.				
b. Select, apply, and translate among mathematical representations to solve problems.				
c. Use representations to model and interpret physical, social, and mathematical phenomena.				