Measures of Academic Progress (MAP) Common Core Aligned Version 4

The NWEA Goal Structure is a document that represents the content and structure of a state's standards documents. Goal structures are created through an alignment process that links state standards documents to the NWEA item bank. The MAP tests and associated reports for teachers and students are based upon this structure and alignment.

The alignment process begins with a thorough review of a state's standards documents by NWEA's curriculum specialists. The general goal areas or strands within a state's standards that appear across grade levels become the goals in the goal structure (indicated below as bold). Areas in a state's standards documents that are determined to be sub-domains of the goals/strands become the sub-goals in the goal structure (indented under each goal below).

Goal and sub-goal names from the Goal Structure are shortened for technical reasons to create the headings in DesCartes. Report Names are shortened further to accommodate report specifications.

Mathematics 2-5 Goal Structure	Mathematics 2-5 DesCartes	Mathematics 2-5 Report Names
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**	**Algebraic Thinking**
Represent and solve problems involving the four operations: Understand and apply properties of operations and the relationship between addition and subtraction; add and subtract within 20; work with addition and subtraction equations; work with equal groups of objects to gain foundations for multiplication; understand properties of multiplication and the relationship between multiplication and division; multiply and divide within 100; write and interpret numerical expressions.	Represent and Solve Problems	
Analyze patterns and relationships: Identify and explain patterns in arithmetic; gain familiarity with factors and multiples; identify arithmetic patterns and explain them using properties of operations; generate a number or shape pattern that follows a given rule; generate two numerical patterns using two given rules, form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.	Analyze Patterns and Relationships	

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Mathematics 2-5 Goal Structure	Mathematics 2-5 DesCartes	Mathematics 2-5 Report Names
Number and Operations	**Number and Operations**	**Number and Operations**
Understand the place value system and counting and cardinality: Know number names and the count sequence; skip-count by 5s, 10s, and 100s; generalize place value understanding for multi-digit whole numbers; read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form; compare two multi-digit numbers based on meanings of the digits in each place; read, write, and compare decimals to thousandths; use place value understanding to round multi-digit whole numbers and decimals to any place.	Understand Place Value, Counting, and Cardinality	
Use place value understanding and properties of operations to perform multi-digit arithmetic: Perform operations with decimals to hundredths; fluently add, subtract, and multiply multi-digit whole numbers using the standard algorithm; use rounding with multi-digit arithmetic; find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors; use strategies based on place value and the properties of operations for multi-digit operations.	Number and Operations in Base Ten	
Number and operations-fractions: Develop understanding of fractions as numbers; understand fraction equivalence and ordering; build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers; understand decimal notation for fractions, and compare decimal fractions; use equivalent fractions as a strategy to add and subtract fractions; apply and extend previous understandings of multiplication and division to multiply and divide fractions; solve word problems involving fractions.	Number and Operations-Fractions	

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Mathematics 2-5 Goal Structure	Mathematics 2-5 DesCartes	Mathematics 2-5 Report Names
Measurement and Data	**Measurement and Data**	**Measurement And Data**
Solve problems involving measurement and understand concepts of geometric measurement: Relate addition and subtraction to length by representing whole number sums and difference on a number line; tell and write time; use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money; convert like measurement units within a given measurement system; understand concepts of area and volume and relate area and volume to multiplication and addition; understand concepts of angle and measure angles; recognize perimeter as an attribute of plane figures and distinguish between linear and area measures; measure and estimate the length of an object.	Geometric Measurement and Problem Solving	
Organize, represent, and interpret data: Generate measurement data by measuring lengths to the nearest whole unit, or by making repeated measurements of the same object; make a line plot to display a data set of measurements in fractions of a unit; use operations on fractions to solve problems involving information presented in line plots; draw a single-unit and scaled picture graph and a single-unit and 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.	Represent and Interpret Data	
Geometry	**Geometry**	**Geometry**

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Mathematics 2-5 Goal Structure	Mathematics 2-5 DesCartes	Mathematics 2-5 Report Names
Reason with shapes and their attributes: Identify and describe shapes; analyze, compare, create, and compose shapes; draw points, lines, line segments, rays, angles, and perpendicular and parallel lines and identify these in two-dimensional figures; classify shapes by properties of their lines and angles; graph points on the coordinate plane to solve real-world and mathematical problems; classify two-dimensional figures into categories based on their properties; partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole; recognize a line of symmetry for a two-dimensional figure.	Reason with Shapes, Attributes, & Coordinate Plane	