

Measures of Academic Progress (MAP) Idaho State-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 |
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| Number and Operations | Number and Operations | Number and Operations |
| Understand and use numbers: Demonstrate knowledge of our numeration system by counting; read, write, compare, and order whole numbers, fractions, and decimals; identify and apply place value in whole numbers and decimals; count the value of a collection of bills and coins; identify decimal equivalents of commonly used fractions; apply the number theory concepts of primes, composites, multiples, and factors. | Understand and Use Numbers | |
| Perform computations accurately: Add, subtract, multiply, and divide whole numbers; add and subtract decimals and fractions; evaluate numerical expressions that include parentheses; use a variety of strategies to solve real life problems. | Perform Computations Accurately | |

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| Estimate and judge reasonableness of results: Use estimation to evaluate the reasonableness of an answer; estimate to predict computation results; estimate a quantity of objects when shown a set.* | Make Reasonable Estimates | |
| Concepts and Principles of Measurement | Concepts and Principles of Measurement | Measurement Concepts |
| Understand and use U.S. customary and metric measurements: Estimate length, time, weight, temperature, and volume (capacity); tell time to the nearest minute; select and use appropriate units and tools to make measurements of length, temperature, weight, and volume (capacity) in both systems; solve real world problems related to elapsed time; calculate the perimeter of polygons and the area of rectangles and squares; convert units of time and length within each system; recall length, volume (capacity), and mass equivalences in both systems. | Understand and Use Measurements | |
| Concepts and Language of Algebra and Functions | Concepts and Language of Algebra and Functions | Algebra and Functions |
| Use algebraic symbolism as a tool to represent mathematical relationships: Write a number sentence using geometric shapes or letters as symbols to represent an unknown number; compare relationships with numbers using vocabulary and symbols; show the relationship between multiplication and division; translate simple word statements into numeric expressions. | Represent Mathematical Relationships | |
| Evaluate algebraic expressions and solve algebraic equations and inequalities: Use the commutative, associative, and distributive properties to solve addition and multiplication problems; use the identity and zero properties of multiplication; solve missing addend and factor equations. | Expressions, Equations, and Inequalities | |

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| Understand the concept of functions and apply them to a variety of problems: Identify the rule for a pattern using whole numbers and extend the pattern; describe and extend a repeating pattern; use patterns to represent problems. | Understand and Apply Functions | |
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| Concepts and Principles of Geometry | Concepts and Principles of Geometry | Geometry Concepts |
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| Apply concepts of size, shape, and spatial relationships: Identify, compare, sort, and analyze attributes of two- and three-dimensional shapes; identify shapes as congruent, similar, or symmetrical; discuss and predict the results of sliding, flipping, and turning two-dimensional shapes; identify and label points, lines, line segments, rays, and angles; classify angles without formal measures as acute, right, obtuse, and/or straight; explain the difference between perimeter and area of a polygon. | Size, Shape, and Spatial Relationships | |
| Apply graphing in two dimensions: Identify the point of final destination given directions for movement on a positive number line; use ordered pairs to identify position and plot points in the first quadrant on a coordinate grid; describe the location of an object relative to another. | Apply Graphing in Two Dimensions | |
| Data Analysis, Probability, and Statistics | Data Analysis, Probability, and Statistics | Probability and Data |
| Collect, organize, display, and analyze data and statistical measurements: Read and interpret pictographs, tables, charts, bar graphs, and line graphs; find measures of central tendency and range of data sets; collect, organize, and display data with appropriate notation in pictographs, tables, charts, bar graphs, and line graphs. | Data Display & Analysis | |
| Understand basic concepts of probability and make predictions or decisions based on data: Predict, perform, and record results of simple probability experiments; use the language of probability; make predictions based on data. | Concepts of Probability & Predictions from Data | |

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| Mathematics 6+ Goal Structure | Mathematics 6+ DesCartes | Mathematics 6+ Report Names |
|---|--|-----------------------------|
| Number and Operations | Number and Operations | Number and Operations |
| Understand numbers, ways of representing numbers, relationships among numbers and number systems, and meanings of operations and their relationships: Compare magnitudes and relative magnitudes of rational numbers; locate numbers on the number line; convert between fractions and decimals and standard, scientific, and exponential form; apply number theory concepts; demonstrate meanings for real numbers, rational numbers, irrational numbers, absolute value, exponents, square roots, logarithms, and complex numbers; demonstrate number properties; use matrices to arrange data. | Relationships among Numbers & Number Systems | |
| Perform computations accurately: Add, subtract, multiply, and divide whole numbers, fractions, decimals, integers, and rational numbers; evaluate numerical expressions with exponents using the order of operations; use a variety of strategies including common mathematical formulas to solve real life problems; perform computations with exponents, radicals, scientific notation, and on expressions within the complex number system. | Perform Computations Accurately | |
| Make reasonable estimates and judge reasonableness of results: Estimate to predict computation results; identify when estimation is appropriate and apply to problem solving situations; apply number sense to contextual situations and judge reasonableness of solutions.* | Make Reasonable Estimates | |

| Concepts and Principles of Measurement | Concepts and Principles of Measurement | Measurement Concepts |
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| Understand measurable attributes of objects and the units, systems, and processes of measurement: Select and use appropriate units and tools to make formal measurements in both systems; make decisions about and select units and scales that are appropriate for a given measurement problem; apply estimation of measurement to problems using standard measuring devices; solve real-world problems related to elapsed time; convert units of measurement within each system; recognize the relationship between radian and degree measures. | Units, Systems, & Processes of Measurement | |
| Apply appropriate techniques, tools, and formulas to determine U.S. customary and metric measurements: Compare the differences and relationships among measures of perimeter, area, and volume (capacity) within both systems; understand and use formulas to calculate the perimeter, circumference, area, surface area, and volume of geometric figures; understand and apply definitions, theorems, corollaries, and postulates to determine measurement. | Apply Techniques, Tools, & Formulas to Measure | |
| Apply dimensional analysis and the concepts of rates, ratios, and proportions: Identify and write ratios and scales; use rates, proportions, ratios, and map scales in problem-solving situations; determine unit rates in real-world situations; convert rates using dimensional analysis. | Concepts of Rates, Ratios & Proportions | |
| Concepts and Language of Algebra and Functions | Concepts and Language of Algebra and Functions | Algebra and Functions |

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| <p>Understand and apply patterns, relations, and functions: Represent functions in a variety of formats; extend patterns and identify a rule; represent a set of data, linear patterns and functional relationships in a table, as a graph, and as a mathematical relationship; describe and graph linear and quadratic functions in terms of intercepts and rate of change; describe the graphs of polynomial and absolute value functions using their key characteristics.</p> | <p>Apply Patterns, Relations, and Functions</p> | |
| <p>Represent, solve, and analyze mathematical situations and structures using algebraic symbols: Simplify and evaluate algebraic expressions using properties; represent linear patterns and relationships with an expression, equation, or inequality; recognize and generate equivalent forms of algebraic expressions and equations; solve algebraic equations, inequalities, and systems of equations and inequalities.</p> | <p>Mathematical Situations: Represent, Solve, Analyze</p> | |
| <p>Concepts and Principles of Geometry</p> | <p>Concepts and Principles of Geometry</p> | <p>Geometry Concepts</p> |
| <p>Analyze characteristics and properties of one-, two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships: Apply concepts of size, shape, and spatial relationships; understand and represent translations, reflections, dilations, and rotations of objects in the plane; identify and apply congruence, similarities, and line symmetry of shapes; use trigonometric relationships to determine lengths and angle measures.</p> | <p>Analyze Characteristics & Properties of Shapes</p> | |

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| Specify locations and describe spatial relationships using coordinate geometry and other representational systems: Identify and plot points on a coordinate plane; analyze the graphs of circles and parabolas; use Cartesian coordinates to analyze geometric situations including determining the midpoint of a segment in the coordinate plane; construct representations of two dimensional geometric objects using straightedge and compass. | Spatial Relationships & Coordinate Geometry | |
| Data Analysis, Probability, and Statistics | Data Analysis, Probability, and Statistics | Probability and Data |
| Select and use appropriate statistical methods to collect, organize, display, and analyze data: Select and use tables, charts, and graphs, including frequency tables, scatter plots, line graphs, line plots, bar graphs, histograms, circle graphs, and stem-and-leaf plots; make predictions using linear relations, scatter plots, trend lines, charts, and tables; choose, calculate, make predictions, and draw conclusions based on the appropriate measure of central tendency and distribution of data. | Select & Use Statistical Methods with Data | |
| Understand basic concepts of probability and make predictions or decisions based on data: Predict, perform, and record results of simple probability experiments; use the language of probability; make predictions based on experimental and theoretical probabilities. | Concepts of Probability & Predictions from Data | |

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| Reading Goal Structure | Reading DesCartes | Reading Report Names |
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| Reading Process: Acquire Concepts About Print, Acquire Concepts About Text, Acquire Phonological Skills, Acquire Decoding Skills Using Word Parts, Acquire Decoding Skills Using Syllabication, Acquire Decoding Skills Using Context, and Vocabulary and Concept Development | Concepts of Print, Decoding, and Vocabulary | Decoding and Vocabulary |
| Acquire Concepts About Print, Acquire Concepts About Text, Acquire Phonological Skills, Acquire Decoding Skills Using Word Parts, and Acquire Decoding Skills Using Syllabication. | Concepts of Print and Decoding | |
| Acquire Decoding Skills Using Context, and Vocabulary and Concept Development. | Vocabulary and Concept Development | |
| Comprehension/Interpretation: Acquire Strategies and Skills for Comprehending Text | Strategies for Comprehending Text | Comprehending Text |
| Answer questions about expository text. | Locating Information | |
| Make inferences, draw conclusions based on information gathered from text. | Predictions, Inferences, and Conclusions | |
| Comprehension/Interpretation: Acquire Skills to Comprehend Expository Text | Expository Text | Expository Text |

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| Identify facts and sequence important information from expository text into a logical order to retell facts; identify main ideas and signal words to summarize information from expository text; summarize the main idea (literal or inferential) and critical details of expository text; synthesize the content from several sources on a single issue; paraphrase ideas to demonstrate comprehension; follow multi-step written directions. | Summarize, Synthesize, Main Idea, Details | |
| Identify cause-effect, compare-contrast, and descriptions that support comprehension; distinguish between facts and opinions in expository text to support comprehension; apply, analyze, and evaluate knowledge of expository text structure to extend comprehension. | Organizational Structures | |
| Determine the author's purpose, stated or implied, for writing various texts; define the purpose and audience of a variety of communication formats. | Author's Purpose, Types of Texts | |
| Comprehension/Interpretation: Acquire Skills for Comprehending Literary Text | Literary Text | Literary Text |
| Identify and describe various genres of fiction and kinds of poetry based on their characteristics; identify common literary devices; analyze ways in which authors use imagery, figures of speech, and the "sound" of language for effect. | Genres of Literature and Literary Devices | |
| Describe characters; determine and analyze characters' traits; identify the setting; analyze the influence and importance of the setting; explain and analyze the main problem, conflict, and resolution of a story plot; identify the narrator of a story; recognize points of view; identify the moral of literary selections; identify themes that appear in different literary works. | Literary Elements | |

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| <p>Synthesize the content from several sources on a single issue; paraphrase ideas to demonstrate comprehension; determine the author's purpose, stated or implied, for writing various texts; apply and distinguish cause and effect relationships to gain meaning from text; compare and contrast similar themes or topics by authors.</p> | <p>Summaries, Author's Purpose, and Text Structure</p> | |
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| Language Usage Goal Structure | Language Usage DesCartes | Language Usage Report Names |
|---|----------------------------------|-----------------------------|
| Writing Process: Acquire Prewriting Skills, Acquire Skills for Writing a Draft, Acquire Expressive (Narrative/Creative) Writing Skills, Acquire Expository (Informational/Research) Writing Skills, and Acquire Persuasive Writing Skills | Prewrite and Draft | Prewrite and Draft |
| Generate ideas using a variety of prewriting strategies. | Organizational Strategies | |
| Select an appropriate writing format for purpose and audience; select organizational strategies appropriate for writing; write narratives; write a variety of expressive works that include sensory details and precise word choices; write a friendly letter, a formal letter, and expository essays; write a research report that includes a thesis, provides relevant support, and documents sources; write persuasive compositions. | Format for Purpose and Audience | |
| Generate a main idea appropriate to the type of writing; write an expository paragraph that contains a main idea and supporting details; write expository essays that include a main idea (thesis), supporting details, and introductory, body, and concluding paragraphs. | Main Idea and Supporting Details | |
| Writing Process: Acquire Skills for Revising and Editing a Draft | Revise and Edit | Revise and Edit |
| Revise draft by adding details to enhance audience understanding; add relevant details and delete irrelevant or redundant information; apply a variety of sentence structures to improve sentence fluency and enhance writing style. | Details and Sentence Structure | |

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| Revise draft for meaning, clarity and effective organization; arrange transition words and phrases in draft to clarify meaning and improve organization. | Words, Sentences, Paragraphs; Transitions | |
| Edit the draft for errors in simple spelling, capitalization, and punctuation; edit for correct punctuation, spelling, grammar, and usage errors; use editing marks to indicate errors in conventions. | Errors in Conventions | |
| Writing Components: Acquire Spelling Skills | Spelling | Spelling |
| Spell correctly high-frequency words and content area words; spell correctly phonetically regular words with common spelling patterns. | Spelling Patterns, Plurals, Homophones | |
| Spell correctly common multisyllabic words that include those with Greek and Latin derivatives. | Affixes and Roots; Word Origins | |
| Writing Components: Acquire Skills for Sentence Structure | Sentence Structure | Sentence Structure |
| Use four types of sentences correctly (exclamatory, declarative, interrogative and imperative). | Kinds of Sentences | |
| Identify the difference between an incomplete and a complete sentence; write correct and varied sentence structure (e.g., simple, compound, complex, and compound-complex); demonstrate in writing the correct use of parallel structure. | Sentence Construction | |
| Identify nouns and verbs; use past and present verb tenses, including irregular verbs; identify and use correctly: future verb tenses, adjectives, personal pronouns, conjunctions, adverbs; demonstrate in writing the correct use of adjective/adverb usage, verb tense, verbals, appositives, and clauses. | Parts of Speech | |
| Use correct subject verb agreement; demonstrate in writing the correct use of conventions emphasizing pronoun/antecedent agreement and subject/verb agreement . | Agreement | |
| Writing Components: Acquire Skills for Using Conventions | Conventions | Conventions |

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| Use ending punctuation; use commas; use parentheses and semicolon; demonstrate in writing the correct use of punctuation. | Punctuation | |
| Capitalize the first word in a sentence, names of people, and the pronoun I; capitalize proper nouns, titles, and holidays; correctly punctuate and capitalize titles, books, geographical names; apply capitalization correctly in writing; demonstrate in writing the correct use of capitalization. | Capitalization | |