

Measures of Academic Progress (MAP) Bermuda Public School System-Aligned Version 1

The NWEA Goal Structure is a document that represents the content and structure of the Bermuda Public School System Performance Standards documents. Goal structures are created through an alignment process that links 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 the standards documents by NWEA's curriculum specialists. The general goal areas or strands within the standards that appear across grade levels become the goals in the goal structure (indicated below as bold). Areas in the 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
Number and Number Operations*	Number and Number Operations	Number and Operations
Numerical Representation: Identify and represent whole numbers, fractions, and decimals	Numerical Representation: Identify and Represent	
Numerical Representation: Compare and order whole numbers and decimals	Numerical Representation: Compare and Order	
Numerical Operations: Rounding, estimating, and verifying solutions with whole numbers and decimals	Numerical Operations: Round, Estimate, Verify	
Numerical Operations: Use and apply addition and subtraction of whole numbers, common fractions, and decimals; apply problem solving strategies	Numerical Operations: Addition and Subtraction	
Numerical Operations: Use and apply multiplication and division of whole numbers; test for divisibility; apply multiplication of common fractions and decimals; apply problem solving strategies	Numerical Operations: Multiplication and Division	

Numerical Relationships: Apply proportional comparisons and relative magnitudes of fractions and decimals	Numerical Relationships: Proportional Comparisons	
Patterns, Functions and Algebra	Patterns, Functions and Algebra	Patterns and Algebra
Patterns and Functions: Represent, describe, recognize, extend, and generalize numeric and geometric patterns	Patterns and Functions: Numeric, Geometric Patterns	
Algebraic Representation: Represent situations, expressions and equations using symbols	Algebraic Representation: expressions and symbols	
Algebraic Reasoning: Solve number sentences with a missing value; model and solve problem situations using objects and tables	Algebraic Reasoning: Solve number sentences	
Geometry	Geometry	Geometry
Classification: Name, identify, describe, classify, and analyse two-dimensional and three-dimensional shapes, transformations, symmetry, and congruence	Classification: Two- and Three-Dimensional Shapes	
Spatial Reasoning and Transformations: Geometric properties, reasoning and visualization can be applied and used to solve problems; combine shapes; identify, predict, and analyse the results of transformations	Spatial Reasoning, Transformations: Solve Problems	
Measurement	Measurement	Measurement
Tools and Units: Identify the appropriate tools and units for measuring length, perimeter, weight, time, money, and temperature; convert units within a system	Units and Tools: Identify; Convert within a System	
Measuring: The comparison of an item with a unit to find length, weight, money, and time; perimeter and area of rectangles, surface area using counting methods	Measuring: Find Measurements and Solve Problems	
Data Handling	Data Handling	Data Handling
Data Collection, Organisation, Representation, Analysis, and Interpretation: Use pictures, tallies, tables, pictographs, bar graphs, and tally charts to organise, display, and interpret data and solve problems	Data: Collect, Organise, Represent, Analyse	

Probability: The occurrence or non-occurrence of an event is characterized as impossible, less likely, equally likely, more likely or certain; list all possible outcomes of a probability experiment	Probability: Likelihood and Sample Spaces	
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*Denotes that calculator use is not permitted in this goal or sub-goal of the test.

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Mathematics 6+ Goal Structure	Mathematics 6+ DesCartes	Mathematics 6+ Report Names
Number and Number Operations	Number and Number Operations	Number and Operations
Numerical Representation: Identify and represent whole numbers, fractions, decimals, rational numbers*	Numerical Representation: Identify and Represent	
Numerical Representation: Compare and order whole numbers and decimals*	Numerical Representation: Compare and Order	
Numerical Operations: Rounding, estimating, and verifying solutions*	Numerical Operations: Round, Estimate, Verify	
Numerical Operations: Use and apply addition and subtraction of rational numbers; properties and order of operations; apply problem solving strategies*	Numerical Operations: Addition and Subtraction	
Numerical Operations: Use and apply multiplication and division of rational numbers; properties and order of operations; apply problem solving strategies*	Numerical Operations: Multiplication and Division	
Numerical Operations: Advanced computations including number theory concepts, scientific notation, exponents, and roots	Numerical Operations: Advanced Computations	
Numerical Relationships: Apply proportional comparisons, relative magnitudes of rational numbers	Numerical Relationships: Proportional Comparisons	
Patterns, Functions and Algebra	Patterns, Functions and Algebra	Functions and Algebra
Patterns and Functions: Represent, describe, recognize, extend, and generalize numeric and geometric patterns; sequences, linear functions, non-linear functions including growth and decay, slope of linear functions, the nature of change	Patterns and Functions: Sequences and Change	

Algebraic Representation: Represent situations, expressions and equations using symbols and graphs; perform operations on algebraic expressions; graph ordered pairs on a coordinate grid	Algebraic Representation: Expressions and Graphs	
Algebraic Reasoning: Solve linear and quadratic equations, linear inequalities, and systems of linear equations using symbolic and graphic methods	Algebraic Reasoning: Equations and Inequalities	
Geometry	Geometry	Geometry
Classification: Name, identify, describe, classify, and analyse two-dimensional and three-dimensional shapes, transformations, symmetry, congruence, and similarity; simple proofs using lines and angles	Classification: Two- and Three-Dimensional Shapes	
Spatial Reasoning and Transformations: Geometric properties, reasoning and visualization can be applied and used to solve problems; combine shapes; identify, predict, and analyse the results of transformations	Spatial Reasoning, Transformations: Solve Problems	
Measurement	Measurement	Measurement
Units and Tools: Identify the appropriate tools and units for measuring length, perimeter, weight, capacity, time, money, and temperature; convert units within a system	Units and Tools: Identify; Convert within a System	
Measuring: The comparison of an item with a unit to find length, weight, capacity, money, time, and temperature; perimeter, circumference, area, surface area, and volume; solve problems using measurement tools and concepts; rate and scale	Measuring: Find Measurements and Solve Problems	
Data Handling	Data Handling	Data Handling
Data Collection, Organisation, Representation, Analysis, and Interpretation: Use pictures, tallies, tables, pictographs, single and double bar graphs, tally charts, line graphs, pie charts, frequency tables, histograms to organise, display, and interpret data and solve problems; find and apply measures of central tendency to analyse data	Data: Collect, Organise, Represent, Analyse	

<p>Probability: The likelihood of an event or its probability is quoted as a ratio between 0 and 1 inclusive; construct sample spaces; find the probability of dependent and independent compound events; use the Fundamental Counting Principle; find combinations and permutations; theoretical and experimental probability</p>	<p>Probability: Sample Spaces; Compound Events</p>	
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Reading Goal Structure	Reading DesCartes	Reading Report Names
Strategic Reading: Word Analysis and Vocabulary	Strategic Reading: Word Analysis and Vocabulary	Word Analysis and Vocabulary
Word Analysis: read regularly spelled 1-2 syllable words; recognize or figure spelling patterns, word endings; demonstrate understanding of letter-sound relationships; know meanings of word parts (prefixes, suffixes, roots)	Word Analysis	
Vocabulary: multiple meaning words; synonyms/ antonyms; words in context; demonstrate understanding of the meaning of new words encountered in independent reading, compound words; apply knowledge of sentence structure and context	Vocabulary	
Strategic Reading: Meaning of Text	Strategic Reading: Meaning of Text	Meaning of Text
Reading Comprehension: Facts/Details, Main Idea: find important facts/details; identify main idea	Reading Comprehension: Facts/Details, Main Idea	
Reading Comprehension: Infer, Conclude: make inferences; draw conclusions; exhibit increased ability to monitor own comprehension by predicting	Reading Comprehension: Infer, Conclude	
Reading Comprehension: Organizational Structures: compare/contrast; determine sequence/cause and effect; use organizational structure to contribute to understanding of text	Reading Comprehension: Organizational Structures	



Comprehension of Informational Text: Expository, Procedural, and Persuasive Text	Comprehension of Informational Text	Informational Text
Structure and Genre: use structure to retrieve information; identify and analyze types and specifications of genre	Structure and Genre	
Author's Purpose and Summarizing: identify and explain purpose; summarize information	Author's Purpose and Summarizing	
Fact/Opinion, Bias, and Persuasive Techniques: detect bias; distinguish fact from opinion; identify the author's persuasive techniques	Fact/Opinion, Bias, and Persuasive Techniques	
Comprehension of Literary Text	Comprehension of Literary Text	Literary Text
Literary Elements, Summarizing, and Author's Purpose: identify the author's purpose; identify and explain a character's traits; identify the basic motivation of a character; identify and analyze literary elements in a work of literature: plot, characterization, point of view, and setting; summarize the plot of a story; identify the conflict, turning point, and resolution of a story; identify and analyze the theme of a literary work	Literary Elements, Summarizing, Author's Purpose	
Literary Devices: identify elements of a literary work that contribute to its style; recognize literary devices (e.g., simile, metaphor, personification, onomatopoeia, sensory details, exaggeration); identify and evaluate the use of literary devices (e.g., similes, metaphors, irony, imagery, personification, foreshadowing, symbolism, flashback); identify and analyze how an author's use of words creates tone and mood	Literary Devices	



<p>Characteristics of Various Genres: identify the characteristics of fiction (e.g., movement through time, imaginative elements) present in a literary work; identify the characteristics of literary nonfiction, (point of view, memoir, essay) and how they contribute to the text; identify the characteristics of poetry (e.g., structure, rhyme, rhythm, word choice) and how they contribute to the meaning of a poem; identify elements of drama (e.g., dialogue, scenes, acts) and how they contribute to the play</p>	<p>Characteristics of Various Genres</p>	
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Language Usage Goal Structure	Language Usage DesCartes	Language Usage Report Names
Grammar and Conventions of Standard English Language: Conventions	Grammar and Conventions: Conventions	Conventions
Capitalization: capitalize proper nouns, regions of a country, titles of people, books, paintings, films and ships, first word in quotations; capitalize words in quotations	Capitalization	
Punctuation: employ the conventions of punctuation to communicate meaning effectively; punctuate using periods, question marks and exclamation marks; punctuate using periods with abbreviations; punctuate using apostrophes with contractions and possessives; use commas to separate main elements of a sentence from each other, separate items in a series, setting off dialogue or quotations; use quotation marks and comma with dialogue	Punctuation	
Spelling: use correct spelling; use correct abbreviations	Spelling	
Grammar and Conventions of standard English Language: Grammar	Grammar and Conventions: Grammar	Grammar
Agreement: use appropriate tenses including past, present, future and perfect tense; use subject-verb agreement; use agreement between pronoun and antecedent	Agreement	
Parts of Speech: recognize special usage problems such as double negatives, incorrectly used homonyms; use noun and verb forms; determine the function, classification, and usage of parts of speech; use adverb and adjective forms	Parts of Speech	



<p>Sentences and Paragraphs: use subject and predicates in sentences; distinguish between complete and incomplete sentences; differentiate grammatically complete sentences from non-sentences (fragment, run-ons); vary sentence type to sustain the reader; develop compound or complex sentences; correct or modify run-on sentences; combine sentences by employing strategies of coordination, subordination, and sequencing of ideas; expand sentences by correctly placing subjects, predicates, and modifiers in appropriate syntactical order</p>	<p>Sentences and Paragraphs</p>	
<p>Writing: Compose Writing</p>	<p>Writing: Compose Writing</p>	<p>Compose Writing</p>
<p>Writing Process: Prewriting and Drafting: develop a controlling idea that conveys a perspective on the selected topic; develop a strong focus; create a sequence of events; develop a plot using appropriate strategies (e.g., elaboration of details, suspense, emotions of characters); create an organizational structure appropriate to purpose, audience, and context; demonstrate control of word choice; demonstrate fluency in expression of ideas; exclude extraneous and inappropriate information; include appropriate facts and details; use a range of appropriate strategies (e.g., anecdotes, definitions, descriptions, comparisons, explanation of benefits or limitations appropriate to the topic) to develop topic; provide a sense of closure; demonstrates attention to audience understanding and interest</p>	<p>Writing Process: Prewriting and Drafting</p>	
<p>Writing Process: Editing and Revising: routinely rework, revise, edit and proofread their work; demonstrate control of conventions of Standard English</p>	<p>Writing Process: Editing and Revising</p>	
<p>Writing: Forms of Writing</p>	<p>Writing: Forms of Writing</p>	<p>Forms of Writing</p>

<p>Narrative, Literary, Informational, Persuasive, and Procedural Writing: compose a short story that has character(s), setting, plot, and movement through time and change; compose a memoir that includes character(s), setting, plot, and movement through time and change; compose to inform or explain; compose a persuasive text that supports or refutes a position</p>	<p>Narr, Lit, Inform, Persuasive, and Procedural</p>	
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