

Measures of Academic Progress (MAP) West Virginia State-Aligned Version 3

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
Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates	Number and Operations	Number and Operations
Numbers: Representation and Relationships	Numbers: Representation and Relationships	
Operations: Addition and Subtraction	Operations: Addition and Subtraction	
Operations: Multiplication and Division	Operations: Multiplication and Division	
Estimation and Rounding	Estimation and Rounding	



Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts	Algebra	Algebra
Patterns, Relations, and Functions	Patterns, Relations, and Functions	
Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities	
Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling	Geometry	Geometry
Properties of 2- and 3- Dimensional Figures	Properties of 2- and 3- Dimensional Figures	
Similarity, Congruence, and Transformations	Similarity, Congruence, and Transformations	
Spatial Relationships and Coordinate Geometry	Spatial Relationships and Coordinate Geometry	
Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements	Measurement	Measurement
Units, Systems, and Processes	Units, Systems, and Processes	
Perimeter, Area, and Volume	Perimeter, Area, and Volume	



<p>Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability</p>	<p>Data Analysis and Probability</p>	<p>Data Analysis and Probability</p>
<p>Organize, Display, and Analyze Data</p>	<p>Organize, Display, and Analyze Data</p>	
<p>Probability</p>	<p>Probability</p>	



Measures of Academic Progress (MAP) West Virginia State-Aligned Version 3

Mathematics 6+ Goal Structure	Mathematics 6+ DesCartes	Mathematics 6+ Report Names
Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates	Number and Operations	Number and Operations
Numbers: Representation and Relationships	Numbers: Representation and Relationships	
Operations: Addition and Subtraction	Operations: Addition and Subtraction	
Operations: Multiplication and Division	Operations: Multiplication and Division	
Estimation and Rounding	Estimation and Rounding	
Percent, Powers, Roots, and Scientific Notation	Percent, Powers, Roots, and Scientific Notation	
Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts	Algebra	Algebra
Patterns, Relations, and Functions	Patterns, Relations, and Functions	
Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities	



Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will: analyze characteristics and properties of two- and three- dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformation and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling	Geometry	Geometry
Properties of 2- and 3- Dimensional Figures	Properties of 2- and 3- Dimensional Figures	
Similarity, Congruence, and Transformations	Similarity, Congruence, and Transformations	
Spatial Relationships and Coordinate Geometry	Spatial Relationships and Coordinate Geometry	
Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements	Measurement	Measurement
Units, Systems, and Processes	Units, Systems, and Processes	
Perimeter, Circumference, Area, and Volume	Perimeter, Circumference, Area, and Volume	
Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability	Data Analysis and Probability	Data Analysis and Probability
Organize, Display, and Analyze Data	Organize, Display, and Analyze Data	
Probability	Probability	



Measures of Academic Progress (MAP) West Virginia State-Aligned Version 3

Reading 2-5 Goal Structure	Reading DesCartes	Reading Report Names
Students will apply reading skills and strategies by identifying and using essential reading components: [Decoding and Word Analysis]	Reading Strategies: Decoding, Word Analysis	Decoding, Word Analysis
Use basic elements of phonetic analysis to decode unknown words and identify and practice basic elements of phonetic analysis (e.g., word patterns, beginning/ending consonants, blends, digraphs, diphthongs, syllabication); use concepts of print (e.g., front of book, title, follow words from left to right and top to bottom, difference between words and letters)	Phonetic Analysis, Concepts of Print	
Use, identify, and practice basic elements of structural analysis to decode unknown words (e.g., prefixes, suffixes, root words, compound words, spelling patterns, contractions)	Structural Analysis	
Students will apply reading skills and strategies by identifying and using essential reading components: Vocabulary	Reading Strategies: Vocabulary	Vocabulary
Understand, identify, and practice reading vocabulary (e.g., synonyms, antonyms, homonyms, content vocabulary, and multiple meaning words)	Multiple Meaning Words, Antonyms, Synonyms	
Use, identify, differentiate, practice and apply a variety of strategies to extend vocabulary (e.g., context clues and etymology)	Context Clues, Word Etymology	
Students will apply reading skills and strategies by identifying and using essential reading components: Comprehension	Reading Strategies: Comprehension	Comprehension
Use comprehension skills and meaning clues in a variety of literary and informational texts (e.g., identify parts of a book, determine main ideas and locate supporting details); Recognize, examine, analyze and evaluate the purpose of organizational patterns (e.g., problem-solution, cause and effect, compare/contrast)	Main Idea, Supporting Detail, Organization	



Use literary and informational texts to summarize, paraphrase, predict, sequence, draw conclusions, infer, determine fact and opinion, evaluate, make judgments, make generalizations, and infer the author’s purpose; use graphic organizers to interpret information (e.g., charts, graphs, tables,); judge the reliability or logic of informational texts; evaluate persuasive language and techniques found in literary and informational texts for intent, purpose, and effectiveness	Summarize, Predict, Sequence, Conclude, Infer	
Students will apply reading skills and strategies by selecting a wide variety of literature to develop as readers	Reading Strategies: Literature	Literature
Recognize and explain the defining characteristics of genre in literary and informational texts (e.g., fairy tales, folk tales, poems, fables, fantasies, biographies, autobiographies, short stories, plays, informational texts, magazines, reference materials, historical fiction, myths, newspapers, textbooks, novels, essays, speeches, science fiction, tall tales, supernatural tales; read and understand various types of poetry and the use of inversion, rhyme, rhythm in narrative poems, ballads, and lyrics	Characteristics of Genres	
Identify and describe the ways in which language is used in literary text (e.g., simile, metaphor, idioms, analogies, puns, personification, jargon); use connotation and denotation to understand meaning	Figurative Language	



<p>Determine the elements of literature (e.g., characterization, conflict, plot, setting, narrative perspective, point of view, theme, voice, tone, mood) to construct meaning; interpret and explain the author’s choice of literary devices used to construct meaning (e.g., exposition, rising action, climax, falling action, catastrophe, denouement)</p>	<p>Elements of Literature</p>	
<p>Identify, explain, interpret, analyze, and demonstrate knowledge of rhetorical and literary devices and techniques used to interpret literature (e.g., flashback, stereotyping, propaganda, irony, satire, symbolism, imagery, assonance)</p>	<p>Literary Devices and Techniques</p>	



Measures of Academic Progress (MAP) West Virginia State-Aligned Version 3

Reading 6+ Goal Structure	Reading DesCartes	Reading Report Names
Students will apply reading skills and strategies by identifying and using essential reading components: [Word Analysis and Vocabulary]	Reading Strategies: Word Analysis and Vocabulary	Word Analysis, Vocabulary
Use basic elements of phonetic analysis to decode unknown words and identify and practice basic elements of phonetic analysis (e.g., word patterns, beginning/ending consonants, blends, digraphs, diphthongs, syllabication); use concepts of print (e.g., front of book, title, follow words from left to right and top to bottom, difference between words and letters); use, identify, and practice basic elements of structural analysis to decode unknown words (e.g., prefixes, suffixes, root words, compound words, spelling patterns, contractions)	Phonics, Concepts of Print, Structural Analysis	
Understand, identify, and practice reading vocabulary (e.g., synonyms, antonyms, homonyms, content vocabulary, and multiple meaning words)	Multiple Meaning Words, Antonyms, Synonyms	
Use, identify, differentiate, practice and apply a variety of strategies to extend vocabulary (e.g., context clues and etymology)	Context Clues, Word Etymology	
Students will apply reading skills and strategies by identifying and using essential reading components: Comprehension	Reading Strategies: Comprehension	Comprehension
Use comprehension skills and meaning clues in a variety of literary and informational texts (e.g., identify parts of a book, determine main ideas and locate supporting details); recognize, examine, analyze and evaluate the purpose of organizational patterns (e.g., problem-solution, cause and effect, compare/contrast)	Main Idea, Supporting Detail, Organization	



Use literary and informational texts to summarize, paraphrase, predict, sequence, draw conclusions, infer, determine fact and opinion, evaluate, make judgments, make generalizations, and infer the author’s purpose; use graphic organizers to interpret information (e.g., charts, graphs, tables,); judge the reliability or logic of informational texts; evaluate persuasive language and techniques found in literary and informational texts for intent, purpose, and effectiveness	Summarize, Predict, Sequence, Conclude, Infer	
Students will apply reading skills and strategies by selecting a wide variety of literature to develop as readers	Reading Strategies: Literature	Literature
Recognize and explain the defining characteristics of genre in literary and informational texts (e.g., fairy tales, folk tales, poems, fables, fantasies, biographies, autobiographies, short stories, plays, informational texts, magazines, reference materials, historical fiction, myths, newspapers, textbooks, novels, essays, speeches, science fiction, tall tales, supernatural tales; read and understand various types of poetry and the use of inversion, rhyme, rhythm in narrative poems, ballads, and lyrics	Characteristics of Genres	
Identify and describe the ways in which language is used in literary text (e.g., simile, metaphor, idioms, analogies, puns, personification, jargon); use connotation and denotation to understand meaning	Figurative Language	
Determine the elements of literature (e.g., characterization, conflict, plot, setting, narrative perspective, point of view, theme, voice, tone, mood) to construct meaning; interpret and explain the author’s choice of literary devices used to construct meaning (e.g., exposition, rising action, climax, falling action, catastrophe, denouement)	Elements of Literature	
Identify, explain, interpret, analyze, and demonstrate knowledge of rhetorical and literary devices and techniques used to interpret literature (e.g., flashback, stereotyping, propaganda, irony, satire, symbolism, imagery, assonance)	Literary Devices and Techniques	



Measures of Academic Progress (MAP) West Virginia State-Aligned Version 3

Language Usage Goal Structure	Language Usage DesCartes	Language Usage Report Names
<p>Students will apply writing skills and strategies to communicate effectively for different purposes by using the writing process and selecting and evaluating information for research purposes</p>	<p>Writing Strategies: Process and Research</p>	<p>Writing Process and Research</p>
<p>Using Prewriting, Editing and Revising Techniques: Use pre-writing, editing and revision techniques to vary sentence length, change sentence order, eliminate organizational errors, and use vivid and concise words to create a personal style or voice while clarifying and enhancing the central idea; use pre-writing, editing and revision techniques to construct complete and varied sentences, eliminate organizational errors and use more precise and concise language; revise sentences to create specific effects, variety and more precise and concise language (gerund phrase) (participle phrase) (infinitive phrase) (clauses); develop a composition that demonstrates an awareness of the intended audience using appropriate language, content and form; revise, edit and strategically employ a variety of sentences for improved variety and more precise and concise language (infinitives)(gerunds)(subordinate clauses)(adjectival phrases,)(word usage/choice variations) (passive/active voice)</p>	<p>Using Prewriting, Editing and Revising Techniques</p>	



<p>Using the Writing Process for Different Purposes and Research: Use the five-step writing process to generate topics, plan and develop a 3 - 5 paragraph composition; plan and incorporate varied note taking skills to organize and synthesize information from print and electronic primary and secondary sources into an outline to develop a composition or research project; use the five-step writing process to develop a creative or reflective composition; demonstrate that written communication is affected by choices writers make in language, tone and voice; develop voice in writing, and create a clear, logical progression of ideas in argumentative writing, research writing, literary analysis, and creative and reflective writing; classify and prioritize different drafting strategies for specific writing tasks to frame a clear, logical progression of ideas in argumentative writing, research writing, literary analysis, and creative and reflective writing; formulate a working research question, organize and consider the relevance of information gathered through the research process, create a detailed outline and produce a research paper with documented and cited sources, using an accepted format (e.g. MLA); document sources of information using a provided bibliographic format; identify, evaluate, and analyze a variety of informational media using primary and secondary sources; construct a clearly worded and correctly placed thesis statement to develop a composition that addresses the assigned topic; create an effective response to a task in form, content and language (e.g., letters, poems, brief reports or descriptions, instructions, journals); write to persuade using order of importance, classifying differences and similarities, classifying advantages and disadvantages</p>	<p>Writing for Different Purposes and Research</p>	
---	--	--



<p>Sentences and Paragraphs: Write correctly formed and punctuated simple sentences (e.g., declarative, interrogative, exclamatory); write and edit the mechanics and grammar of a variety of sentence types (simple) (compound) (declarative) (exclamatory) (imperative) (interrogative); use the five-step writing process to develop a focused composition that contains specific, relevant details, and vivid, precise words; use the writing process to develop a 3-5 paragraph composition with an introductory paragraph, supporting detail paragraph(s), and concluding paragraph that incorporates specific, relevant details; create and apply transition sentences to signal progression of ideas between paragraphs as well as appropriate words and phrases to signal organizational patterns</p>	<p>Sentences and Paragraphs</p>	
<p>Students will apply writing skills and strategies to communicate effectively for different purposes by applying grammatical properties in writing</p>	<p>Applying Grammatical Properties in Writing</p>	<p>Grammar</p>
<p>Identify and produce a sentence with proper word choice to include (verb tense) (verb usage) (subject/verb agreement) (pronoun usage) (adjectives and adverbs)</p>	<p>Verbs, Agreement, Pronouns, Adjectives, Adverbs</p>	
<p>Produce appropriate grammar in written composition</p>	<p>Produce Appropriate Grammar in Compositions</p>	
<p>Students will apply writing skills and strategies to communicate effectively for different purposes by applying mechanical properties in writing</p>	<p>Applying Mechanical Properties in Writing</p>	<p>Mechanics</p>
<p>Conventions of Spelling: Identify and apply conventions of spelling in written composition (e.g., spell commonly misspelled words from appropriate grade level lists, use syllable constructions to spell words, use vowel combinations for correct spelling, use affixes, spell high frequency words from appropriate grade level list, use letter/sound relationships to spell independently, make structural changes to spell words correctly, spell irregular verbs and irregular plural nouns)</p>	<p>Conventions of Spelling</p>	



<p>Conventions of Capitalization: Identify and apply conventions of capitalization in written composition (e.g., greeting, heading, closing of a letter, first word of a direct quotation, titles, initials, titles of written works, greeting and closing of a letter, days of the week, months of the year, names of people, special places, first and last name, first word of sentence, I)</p>	<p>Conventions of Capitalization</p>	
<p>Conventions of Punctuation: Identify and apply conventions of punctuation in written composition (e.g., commas in dates, addresses and greeting/closing of a letter, quotation marks around titles and direct quotations, apostrophes for contractions and possessive nouns, period in abbreviations, initials, commas in dates, greeting and closing of letter, separate city-state-country, separate items in a list, apostrophe in contractions and singular possessives, period, question mark, exclamation mark)</p>	<p>Conventions of Punctuation</p>	

