

A Complete Collection of the Performance Descriptors for Mastery in ELA, Math, Science, and Social Studies for Grades Kindergarten through 12th Grade

PERFORMANCE DESCRIPTORS FOR MASTERY

6TH GRADE ENGLISH LANGUAGE ARTS

Speaking and Listening

Performance Descriptors:

- 1. Listen to a variety of media and respond to the content.
- 2. Listen to a variety of media and respond to the content.
- 3. Listen to a variety of media and respond to the content.

Mathematical Practices:

- 1. Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively.
- 3. Construct viable arguments and critique the reasoning of others.
- 4. Model with mathematics.
- 5. Use appropriate units and labels.
- 6. Attend to precision.
- 7. Look for and make use of structure.
- 8. Look for and express regularity in repeated patterns.

Reading

Performance Descriptors:

- 1. Read and comprehend literary texts.
- 2. Read and comprehend informational texts.
- 3. Read and comprehend media texts.
- 4. Read and comprehend texts from multiple media.
- 5. Read and comprehend texts from multiple media.
- 6. Read and comprehend texts from multiple media.
- 7. Read and comprehend texts from multiple media.
- 8. Read and comprehend texts from multiple media.

Writing

Performance Descriptors:

- 1. Write narratives that develop real or imagined experiences or events.
- 2. Write informative/explanatory texts.
- 3. Write persuasive texts.
- 4. Write texts that analyze.
- 5. Write texts that synthesize.
- 6. Write texts that synthesize.
- 7. Write texts that synthesize.
- 8. Write texts that synthesize.

Language

Performance Descriptors:

- 1. Demonstrate command of language conventions.
- 2. Demonstrate command of language conventions.
- 3. Demonstrate command of language conventions.
- 4. Demonstrate command of language conventions.
- 5. Demonstrate command of language conventions.
- 6. Demonstrate command of language conventions.
- 7. Demonstrate command of language conventions.
- 8. Demonstrate command of language conventions.

Next Generation

Performance Descriptors:

- 1. Read and comprehend literary texts.
- 2. Read and comprehend informational texts.
- 3. Read and comprehend media texts.
- 4. Read and comprehend texts from multiple media.
- 5. Read and comprehend texts from multiple media.
- 6. Read and comprehend texts from multiple media.
- 7. Read and comprehend texts from multiple media.
- 8. Read and comprehend texts from multiple media.

Statistics and Probability

Performance Descriptors:

- 1. Understand statistics and probability.
- 2. Understand statistics and probability.
- 3. Understand statistics and probability.
- 4. Understand statistics and probability.
- 5. Understand statistics and probability.
- 6. Understand statistics and probability.
- 7. Understand statistics and probability.
- 8. Understand statistics and probability.

Text-Dependent Questions

Performance Descriptors:

- 1. Answer text-dependent questions.
- 2. Answer text-dependent questions.
- 3. Answer text-dependent questions.
- 4. Answer text-dependent questions.
- 5. Answer text-dependent questions.
- 6. Answer text-dependent questions.
- 7. Answer text-dependent questions.
- 8. Answer text-dependent questions.

Literacy Shifts in All Content Areas

Performance Descriptors:

- 1. Read and comprehend literary texts.
- 2. Read and comprehend informational texts.
- 3. Read and comprehend media texts.
- 4. Read and comprehend texts from multiple media.
- 5. Read and comprehend texts from multiple media.
- 6. Read and comprehend texts from multiple media.
- 7. Read and comprehend texts from multiple media.
- 8. Read and comprehend texts from multiple media.

Building Blocks for the Future

2015-2016

~ Slogoski Blocks ~

“Good teaching comes not from behind the desk, but from behind the head.”

Team Support Assistance Focus

A Powerful Engine for Education

RESA 6

PERFORMANCE DESCRIPTORS FOR MASTERY

6TH GRADE SOCIAL STUDIES

History

Performance Descriptors:

- 1. Understand the historical context of the United States.
- 2. Understand the historical context of the United States.
- 3. Understand the historical context of the United States.
- 4. Understand the historical context of the United States.
- 5. Understand the historical context of the United States.
- 6. Understand the historical context of the United States.
- 7. Understand the historical context of the United States.
- 8. Understand the historical context of the United States.

Geography

Performance Descriptors:

- 1. Understand the geographical context of the United States.
- 2. Understand the geographical context of the United States.
- 3. Understand the geographical context of the United States.
- 4. Understand the geographical context of the United States.
- 5. Understand the geographical context of the United States.
- 6. Understand the geographical context of the United States.
- 7. Understand the geographical context of the United States.
- 8. Understand the geographical context of the United States.

Economics

Performance Descriptors:

- 1. Understand the economic context of the United States.
- 2. Understand the economic context of the United States.
- 3. Understand the economic context of the United States.
- 4. Understand the economic context of the United States.
- 5. Understand the economic context of the United States.
- 6. Understand the economic context of the United States.
- 7. Understand the economic context of the United States.
- 8. Understand the economic context of the United States.

Government

Performance Descriptors:

- 1. Understand the political context of the United States.
- 2. Understand the political context of the United States.
- 3. Understand the political context of the United States.
- 4. Understand the political context of the United States.
- 5. Understand the political context of the United States.
- 6. Understand the political context of the United States.
- 7. Understand the political context of the United States.
- 8. Understand the political context of the United States.

Science

Performance Descriptors:

- 1. Understand the scientific context of the United States.
- 2. Understand the scientific context of the United States.
- 3. Understand the scientific context of the United States.
- 4. Understand the scientific context of the United States.
- 5. Understand the scientific context of the United States.
- 6. Understand the scientific context of the United States.
- 7. Understand the scientific context of the United States.
- 8. Understand the scientific context of the United States.

Application of Science

Performance Descriptors:

- 1. Apply scientific knowledge to real-world problems.
- 2. Apply scientific knowledge to real-world problems.
- 3. Apply scientific knowledge to real-world problems.
- 4. Apply scientific knowledge to real-world problems.
- 5. Apply scientific knowledge to real-world problems.
- 6. Apply scientific knowledge to real-world problems.
- 7. Apply scientific knowledge to real-world problems.
- 8. Apply scientific knowledge to real-world problems.

Next Generation

Performance Descriptors:

- 1. Read and comprehend literary texts.
- 2. Read and comprehend informational texts.
- 3. Read and comprehend media texts.
- 4. Read and comprehend texts from multiple media.
- 5. Read and comprehend texts from multiple media.
- 6. Read and comprehend texts from multiple media.
- 7. Read and comprehend texts from multiple media.
- 8. Read and comprehend texts from multiple media.

PERFORMANCE DESCRIPTORS FOR MASTERY



FAST Team Services, Support, and Programs for ALL schools



The 7 Standards for High Quality Schools and RESA Services

Standard I: Positive Climate and Cohesive Culture			<ul style="list-style-type: none"> EWalk Visual Tour Activity Interim Self-Reflection Activity Assistance with the WVDE Culture and/or Climate Survey 			
Standard II: School Leadership			<ul style="list-style-type: none"> Professional Learning Facilitation PLC organization/management Action Research /Graduate Credit Program Principals' Regional Institute (PRI) Kindergarten Trainer of Trainers iBelieve Grants Graduation 20/20 			
Standard III: Standards-Focused Curriculum, Instruction and Assessment			<ul style="list-style-type: none"> Zoom WV-e Digital Library Co-teaching Differentiated Instruction, Scaffolding and SPI Alignment Talks (formerly CAP) Performance Descriptors for Mastery Best Practices Next Generation ELA and Math Curriculums Universal Design for Learning Universal Pre-K 			
Standard IV: Student Support Services and Family/Community Connections			<ul style="list-style-type: none"> PBIS SPI CPI (Policy 4373) Literacy Collaborative Committee SPL Classroom Management Bus/Student Management 			
Standard V: Educator Growth and Development			<ul style="list-style-type: none"> RESA 6 Created Professional Learning opportunities Catalyst Schools and Learning Schools Policy 2320 Training Master Teacher PDXpert Modules Co-Teaching Manual and Support IPI Certified Coder Training and Support 			
Standard VI: Efficient and Effective Management			<ul style="list-style-type: none"> Interim Self-Reflection Activity Alignment Talks (CAP) Performance Descriptors for Mastery Data Analysis Strategies and Tools School-specific Scheduling Assistance 			
Standard VII: Continuous Improvement			<ul style="list-style-type: none"> Strategic Plan Support OEPA Audit Disaggregation (County/Regional) Grant Writing Master Teacher PDXpert Modules Interim Self-Reflection Zoom WV-e 			

PERFORMANCE DESCRIPTORS FOR MASTERY

KINDERGARTEN ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors
Mastery
Kindergarten students at mastery level in reading:
with prompting and support retell literary and informational texts, identify story elements, key details and main ideas and make connections between two individuals, events, ideas or texts; use questioning to develop vocabulary, recognize types of texts and, with prompting and support, identify the role of authors and illustrators to comprehend literary and informational texts;
with prompting and support, compare and contrast key elements, similarities and central ideas; describe relationships between text and illustrations; and identify authors' supporting reasons in literary and informational texts;
actively engage in group reading experiences of literary and informational texts with purpose and understanding;
demonstrate directionality and word recognition; recognize and name all upper and lowercase letters of the alphabet;
recognize and produce rhyming words; count, segment, pronounce and blend onsets, rimes and syllables; pronounce all phonemes in three phoneme words; and substitute phonemes in one-syllable words to make new words;
produce the primary sound for each consonant as well as for each long and short vowel; read high-frequency sight words; and distinguish word families by identifying sounds and letters that differ;
read emergent level text with purpose and understanding.

Writing:

Performance Descriptors
Mastery
Kindergarten students at mastery level in writing:
use a combination of drawing, dictating and writing to compose opinion pieces about books, informative/explanatory pieces that state a main topic with supporting information and narrate a sequence of events including their reactions to them;
collaborate with peers and adults and use multiple digital tools to expand and publish their writings;
work with adults and peers to recall or gather information and answer questions to participate in shared research and writing projects.

Speaking and Listening:

Performance Descriptors
Mastery
Kindergarten students at mastery level in speaking and listening:
follow rules to participate in and continue multiple conversations with diverse partners in small and large groups; ask and answer questions about key details of diverse media, seek help and clarify misunderstandings;
demonstrate increasing ability to speak audibly and to express thoughts, feelings and ideas clearly using visuals for clarification when appropriate.

Language:

Performance Descriptors
Mastery
Kindergarten students at mastery level in language:
print many letters, use nouns, verbs, prepositions, interrogatives and the formation of regular plural nouns to expand complete sentences in shared language activities; capitalize the first word in a sentence and the pronoun "I," recognize and name end punctuation, write letter(s) for consonant and vowel sounds and spell simple words phonetically;
use acquired vocabulary, inflections and affixes to determine or clarify unknown multiple meaning words and phrases; with adult guidance and support, sort objects, relate antonyms to verbs and adjectives, identify real-life connections to words and act out verbs.



12TH GRADE SOCIAL STUDIES

Geography:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in geography:
evaluate stages of development and analyze sustainable development that balance healthy economic growth with environmental protection;
research, debate and evaluate demographic data on a variety of local and global issues; and
research different types GIS systems to determine the most effective technology for various purposes.

Economics/Personal Finance:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in finance:
evaluate how career choice influences personal economic future;
apply basic economic concepts to personal financial literacy;
examine the rights and responsibilities of informed consumers and producers; and
research various banking, credit, investment, and spending activities to evaluate sound financial decisions.

Civics:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in civics:
explain the protection of personal, political and economic rights of citizens as the purpose of American constitutional government;
interpret the different roles of citizens in politics and government;
outline the different levels and forms of government and evaluate how political, religious and economic climates influence decision making;
research and analyze the impact of the media, special interest groups and political parties on political issues and public policy;
examine the influence of the United States on global issues;
explain the factors which influenced the foundational documents;
summarize the Supreme Court interpretations of the Constitution; and
work with others to seek consensus, compromise and manage conflict.

Literacy:

Performance Descriptors
Mastery
Eleventh and twelfth grade students at mastery level in literacy:
cite textual evidence; summarize the relationships; evaluate explanations acknowledging where the text leaves matters uncertain;
determine how the meaning of a key term is refined over the course of a text; evaluate differing points of view;
evaluate multiple sources presented in diverse formats and media; evaluate author's premises, claims, and evidence; integrate information, noting discrepancies among sources;
read and comprehend history/social studies texts in the grades 11-CCR text complexity band independently and proficiently;
compose arguments and informative/explanatory texts; develop the topic with significant details to create a unified whole;
use technology to develop, strengthen, publish and present clear and coherent writing and update in response to ongoing feedback, including new arguments or information;
conduct short and sustained research projects synthesizing multiple sources; assess the strengths and limitations of each source; avoid plagiarism and overreliance on any one source; and write over extended time frames for research-based projects and shorter time frames for a range of discipline-specific tasks, purposes and audiences.



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PERFORMANCE DESCRIPTORS FOR MASTERY

KINDERGARTEN SCIENCE

Nature of Science:

SC.PD.K.1

Mastery

Kindergarten students at the mastery level ask questions about themselves and their world; use safety techniques; explore and describe objects and events using their senses and scientific instruments.

Students will:

- Demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers.
- Demonstrate the abilities and understanding necessary to do scientific inquiry.
- Demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.

Application of Science:

SC.PD.K.3

Mastery

Kindergarten students at the mastery level recognize models as representations of real things; observe and identify changes that occur within the environment; be tolerant of different viewpoints while working in a group; observe and identify the use of tools and appliances in everyday life.

Students will:

- Recognize models as representations of real things.
- Observe that changes occur gradually, repetitively, or randomly within the environment.
- Listen and be tolerant of different viewpoints while working in collaborative groups.
- Observe and identify the use of tools and appliances in everyday life.

Content of Science:

SC.PD.K.2

Mastery

Kindergarten students at the mastery level identify living and nonliving things; describe changes in plants and animals and their environment; sort and group objects; identify solids and liquids; explore magnetic properties, motion and changes in energy; identify celestial objects and changes in weather; compare differences in earth materials.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



12TH GRADE MATHEMATICS

Building Relationships
Among Complex Numbers,
Vectors, and Matrices:

Performance Descriptors

Mastery

Math IV students at the mastery level in mathematics:
make sense of all four binary operations of complex numbers in either form;
determine appropriate forms and manipulate with accuracy and precision;
represent abstract situations involving vectors symbolically;
make sense of a geometric representation of vector operations;
interpret transformations in the plane in terms of multiplication by 2 x 2 matrices; recognize the role of the determinant in finding area;
create a coherent representation of any system of linear equations as a matrix.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Derivations in Analytic Geometry:

Performance Descriptors

Mastery

Math IV students at the mastery level in mathematics:
make sense of the derivations of the equations of an ellipse and a hyperbola;
understand the meaning of Cavalieri's principle, including non-congruent cross sections.

Trigonometric and Inverse
Trigonometric Functions
of Real Numbers:

Performance Descriptors

Mastery

Math IV students at the mastery level in mathematics:
make sense of the symmetry, periodicity, and special values of trigonometric functions using the unit circle;
solve trigonometric equations in modeling contexts;
prove trigonometric identities and apply them problem solving situations;
calculate phase shift of a trigonometric function with accuracy and precision.

Analysis and Synthesis
of Functions:

Performance Descriptors

Mastery

Math IV students at the mastery level in mathematics:
utilize informal limits to analyze vertical asymptotes;
make sense of composition relationships in problem situations;
restrict the domain of a function to create an invertible function and make sense of the inverse relationship between exponential and logarithmic functions.

Modeling with Probability:

Performance Descriptors

Mastery

Math IV students at the mastery level in mathematics:
understand probability distributions and expected value as a mean;
create a decision-making strategy based upon expected values.



Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Series and Informal Limits:

Performance Descriptors

Mastery

Math IV students at the mastery level in mathematics:
apply mathematical induction to prove summation formulas;
understand that an infinite sum of positive numbers can converge.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and it's academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

Nature and Application of Science:

SC.PD.12.1	Mastery
Chemistry students at mastery level in the nature and applications of science:	
implement safe practices as they design, conduct, and revise experiments and base conclusions on observations and experimental evidence, and	
relate science-technology-societal issues while using a variety of sources to construct and defend their solutions.	

Students will:

- Demonstrate an understanding of history and nature of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate the ability to use the inquiry process to solve problems.
- Relate science-technology-societal issues while using a variety of sources to construct and defend their solutions

Content of Science:

SC.PD.12.2	Mastery
Chemistry students at mastery level:	
classify pure substances by their chemical and physical properties;	
relate scientific explanations based on historical observations and experimental evidence to explain atomic theory, bonding, structure and periodic trend; generate the correct formula and/or name ionic or molecular compounds;	
write and classify balanced chemical reactions;	
perform the following 'mole' calculations: molarity, percentage composition, empirical and molecular formula, formulas of hydrates and theoretical yield; determine experimentally the effects of temperature and concentration on solution properties;	
perform calculations using the combined gas laws; compare methods of measuring pH while conducting a neutralization experiment;	
apply the appropriate oxidation numbers to balance redox reactions, and identify oxidation numbers to determine electron movement.	

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology, earth/environmental science and astronomy.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



KINDERGARTEN MATHEMATICS

Operations and Algebraic Thinking:

Performance Descriptors	Mastery
Kindergarten students at the mastery level in mathematics:	
represent addition and subtraction within ten (fluently to five), solve word problems, and decompose numbers.	

Counting & Cardinality:

Performance Descriptors	Mastery
Kindergarten students at the mastery level in mathematics:	
count to 100 by ones and tens, count forward from a given number, write and represent numbers 0 to 20 using concrete objects;	

know that the last number said tells the number of objects counted and that each successive number is one more, tell how many when given different arrangements and structures of up to twenty objects;

use matching and counting strategies to identify groups of objects as greater than, less than, or equal to the number of objects in another group and compare values of written numerals between 1 and 10.

Geometry:

Performance Descriptors	Mastery
Kindergarten students at the mastery level in mathematics:	
identify, name and describe two- and three-dimensional shapes in the environment, by their orientation, size and relative positions; analyze, compare and describe two- and three-dimensional shapes; model, build and draw shapes, and use simple shapes to compose larger ones.	

Measurement and Data:

Performance Descriptors	Mastery
Kindergarten students at the mastery level in mathematics:	
measurable attributes using vocabulary such as more/less, taller/shorter, etc.;; classify, count, and sort objects equal to or less than ten.	

Number and Operations in Base 10:

Performance Descriptors	Mastery
Kindergarten students at the mastery level in mathematics:	
compose and decompose numbers from 11 - 19 using place value with objects, drawings, or equations.	

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.



Literacy Shifts in All Content Areas:

- Regular practice with complex text and it's academic language.
- Reading, writing and speaking grounded in evidence from text, both literary and informational.
- Building knowledge through content-rich nonfiction.



PERFORMANCE DESCRIPTORS FOR MASTERY

12TH GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in reading: determine where and why the text leaves matters uncertain, evaluate two or more themes and how they interact and build on one another and provide a complex analysis of the impact of the author's choices regarding how to develop and relate elements of a story or drama; analyze a complex set of ideas or sequence of events explaining how specific individuals, ideas or events interact and develop; critically analyze literary and informational texts; analyze and evaluate the effectiveness of how and why an author uses structure and meaning to clarify, convince, engage and contribute to the aesthetic impact and determine point of view or purpose in which rhetoric is effective, distinguishing what is said from what is meant and analyzing and evaluating the contribution of style and content; analyze and critically evaluate reasoning and how multiple interpretations of themes or topics in different media or formats interpret the source text as well as integrate, evaluate and synthesize multiple sources of information to address a question or solve a problem considering themes, purposes and rhetorical features; read and comprehend literary and informational texts in the grades 11-CCR complexity band independently and proficiently.



Writing:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in writing: compose arguments and informative/explanatory texts using rhetorical devices, varied syntax and relevant evidence to thoroughly develop and establish the significance of logically sequenced knowledgeable claims, counterclaims, reasons and evidence while anticipating the audience's values and possible biases; write narratives that convey the significance of the problem, situation or observation building toward a particular tone and outcome using well-structured sequences to establish point of view and capture action; use technology to develop and strengthen writing in response to ongoing feedback, including new arguments or information while recognizing the benefit of the sustained writing process; assess and evaluate the strengths and limitations of each source in terms of task, purpose and audience avoiding plagiarism and overreliance on any one source and following a standard format for citation in sustained research projects that include the premises, purposes and arguments in works of public advocacy; write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences.

Regional Education
Service Agencies

RESA

• six •

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Speaking and Listening:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in speaking and listening: set clear goals, deadlines and individual roles to promote civil, democratic discussions that probe reasoning, evidence and divergent and creative perspectives, synthesize comments, claims and evidence, resolve contradictions when possible, determine and conduct additional research to make informed decisions and solve problems; and assess the stance, premises and links among ideas, word choice, points of emphasis and tone; convey a clear and distinct perspective and address alternative or opposing perspectives for a range of formal and informal tasks; and use digital media to enhance and add interest.

Language:

Performance Descriptors
Mastery
Twelfth grade students at mastery level in language: use hyphenation conventions, understand that usage can change over time and resolve issues of complex or contested usage by consulting a variety of references; vary syntax for effect, consult references and apply an understanding of syntax to the study of complex texts when reading or listening; clarify a word's usage and interpret figures of speech such as hyperbole and paradox in context and analyze their roles in the text independently and proficiently.

KINDERGARTEN SOCIAL STUDIES

Geography:

Performance Descriptors
Mastery
Kindergarten students at mastery level in geography: construct a simple map; locate bodies of water and land masses on a globe and map and compare their relative locations; compare and contrast the characteristics of the seasons and describe the characteristics of different types of weather; and describe symbols and the need for them in the school and community.

Civics:

Performance Descriptors
Mastery
Kindergarten students at mastery level in civics: describe citizenship and patriotism in the class-room and home; explain the importance of rules and participate in developing rules while showing tolerance for others and their ideas; and give examples of leaders and their roles in their daily lives.

Economics:

Performance Descriptors
Mastery
Kindergarten students at mastery level in economics: give examples of the occupations in the school and local community and recognize some of their duties; demonstrate the concept of the exchange of goods and services; and discuss the basic needs of people and differentiate between wants and needs.

West Virginia History:

Performance Descriptors
Mastery
Kindergarten students at mastery level in West Virginia Studies: identify and describe important state symbols, holidays, celebrations, people and climate; and compare and contrast past and present lifestyles of West Virginians.

Regional Education
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History:

Performance Descriptors
Mastery
Kindergarten students at mastery level in history: with adult help describe elements of families and schools by collecting and examining data that relates to the students' lives; research the past through literature, art, customs and songs, and explain differences in other people, times and cultures; and collaborate with peers and adults to organize their personal history.

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1ST GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors	Mastery
First grade students at mastery level in reading:	retell literary and informational texts, identify story elements, key details, main ideas and theme; make connections between two individuals, events, ideas or texts;
	develop vocabulary through questioning and text features, determine genre and narration, use illustrations and words to comprehend a range of literary and informational texts;
	compare and contrast key elements, similarities and central ideas in texts; describe relationships between texts and illustrations; and identify authors' supporting reasons in literary and informational texts;
	read and comprehend literary and informational text with grade 1 complexity proficiently with scaffolding;
	recognize the distinguishing features of a sentence;
	orally produce, isolate and segment phonemes and distinguish between short and long vowel sounds;
	use spelling sound correspondences and rules of syllabication to decode words including those with inflectional endings;
	read on level text with sufficient accuracy, fluency, expression, purpose and understanding using context and rereading to self-correct.

Writing:

Performance Descriptors	Mastery
First grade students at mastery level in writing:	write opinion and informative/explanatory text, which name a topic, give details and include an introduction, support and closure; write narratives with appropriate sequence, details and transitional words;
	focus on a topic and use a variety of digital tools to strengthen and publish writing with guidance and support;
	work with adults and peers to recall or gather information and answer questions on a given topic to write a sequence of instructions in shared research and writing projects.



Speaking and Listening:

Performance Descriptors	Mastery
First grade students at mastery level in speaking and listening:	build on conversations by responding to others with care and by asking questions to clarify and gather additional information;
	speak audibly in complete sentences to describe relevant details, expressing them clearly while using visuals for clarification when appropriate.

Language:

Performance Descriptors	Mastery
First grade students at mastery level in language:	use nouns, pronouns, verbs, adjectives and conjunctions correctly in simple and compound sentences in response to prompts; use commas in dates and series; and draw on phonemic awareness to spell untaught words;
	use context clues, root words and inflectional forms to sort and determine the meaning of words or phrases, the different shades of meaning or intensity of words; use conjunctions to signal relationships among words.

Geography:

Performance Descriptors	Mastery
Eleventh grade students at mastery level in geography:	draw conclusions about the causes of changing international boundaries before and after wars since 1914;
	assess population growth, both natural and immigration; and
	compare and contrast the decisions and policies related to human environmental interactions.

Economics/Personal Finance:

Performance Descriptors	Mastery
Eleventh grade students at mastery level in finance:	analyze the U.S. economy, including the effects of various wars, executive initiatives and legislation; examine U.S. economic philosophy during the 1920s and 1930s and relate it to the concept of supply and demand;
	compare and contrast the lack of regulations on banking and securities in the 1920s and 1990s and discuss the role of consumerism in the U.S. economy;
	critique various economic systems and their roles in world conflicts;
	identify developed countries and developing countries and determine the standard of living of their citizens; explain how the U.S. national debt affects world economic systems.



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Civics:

Performance Descriptors	Mastery
Eleventh grade students at mastery level in civics:	compare and contrast citizens' responses to governmental decisions;
	analyze U.S. and world conflicts and evaluate their resolutions;
	evaluate major U.S. court cases and their relationship to fundamental democratic principles;
	justify the duties of citizens and evaluate the importance of fundamental democratic values and principles;
	examine global challenges of the post 9/11 world and predict problems of the future; and
	participate in a volunteer service project.

History:

Performance Descriptors	Mastery
Eleventh grade students at mastery level in history:	draw conclusions about the various events associated with World War I and their effect on the U.S. as a world power;
	critique significant events that defined the Roaring '20's and their effect on culture, economics, and politics;
	examine the economic, social and political effects of the Great Depression upon the U.S.;
	cite evidence of significant events and ideas connected with historical totalitarian aggression, the fight for human rights and the spread of democracy; assess events and ideas to determine the vested interests of either U.S. democracy or Soviet Union communism;
	summarize the struggles and progression of the fight for civil rights by various groups in the U.S.;
	compare various strategies of activists in social conflicts of the second half of the 20th century in the U.S.;
	draw conclusions about the effectiveness of U.S. Foreign Policy dealing with global economic issues since 1990; and
	critique the involvement of the U.S. in the post 9/11 world, including the war on terrorism.

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11TH GRADE SOCIAL STUDIES

Literacy:

Performance Descriptors	Mastery
Eleventh and twelfth grade students at mastery level in literacy:	cite textual evidence; summarize the relationships; evaluate explanations acknowledging where the text leaves matters uncertain;
	determine how the meaning of a key term is refined over the course of a text; evaluate differing points of view;
	evaluate multiple sources presented in diverse formats and media; evaluate author's premises, claims, and evidence; integrate information, noting discrepancies among sources;
	read and comprehend history/social studies texts in the grades 11-CCH text complexity band independently and proficiently;
	compose arguments and informative/explanatory texts; develop the topic with significant details to create a unified whole;
	use technology to develop, strengthen, publish in response to ongoing feedback, including new arguments or information;
	conduct short and sustained research projects synthesizing multiple sources; assess the strengths and limitations of each source; avoid plagiarism and overreliance on any one source; and
	write over extended time frames for research-based projects and shorter time frames for a range of discipline-specific tasks, purposes and audiences.



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PERFORMANCE DESCRIPTORS FOR MASTERY

1ST GRADE SCIENCE

Nature of Science:

SC.PD.1.1

Mastery

First grade students at the mastery level discuss scientists' lives and discoveries; question environmental changes; compare information by using a classification system; use a variety of communication techniques to safely collect and record information.

Students will:

- Demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers.
- Demonstrate the abilities and understanding necessary to do scientific inquiry.
- Demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.

Application of Science:

SC.PD.1.3

Mastery

First grade students at the mastery level identify how parts of a system interact; recognize and use models as representations of real things; distinguish between natural and man-made objects; demonstrate tolerance of different points of view; engage in conservation practices.

Students will:

- Identify how the parts of a system interact,
- Recognize and use models as representations of real things,
- Demonstrate the ability to distinguish between natural and man-made objects,
- Listen and be tolerant of different viewpoints while working in collaborative groups, and
- Demonstrate the ability to evaluate the impact of different points of view on health, population, resources and environment practices.

Content of Science:

SC.PD.1.2

Mastery

First grade students at the mastery level classify objects as living and non-living; describe needs, growth changes and life cycles in living organisms; classify objects as magnetic or nonmagnetic; recognize that water can change states and investigate buoyancy of objects in water; recognize that materials can be recycled; describe changes in an object's motion; demonstrate that sounds are produced by vibrations; record changes in weather and its effect on living things; discuss the importance of celestial objects and their movement; using models, compare land and water features; investigate properties of soil; and discuss the important uses of air.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



11TH GRADE MATHEMATICS

Inferences and Conclusions from Data:

Performance Descriptors

Mastery

Math III students at the mastery level in mathematics:
use available technology to estimate appropriate outcome ranges for a given a set of normally distributed data;
decide if a specified model is consistent with a population based on a random sample and recognize that theoretical results may be different from empirical results;
recognize that the random sample affects validity and based on its accuracy make a prediction of the outcome;
make and analyze decisions based on probability.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Polynomials, Radical Relationships:

Performance Descriptors

Mastery

Math III students at the mastery level in mathematics:
factor nth degree polynomials into n factors looking for both general methods and shortcuts;
interpret structure in the context of the situation;
derive and apply the formula for the summation of a geometric series;
perform operations with polynomials applying the mathematics they know from the field properties of integers;
determine the factors of a polynomial from the zeros and vice versa; analyze this relationship to sketch the graph;
solve problems using the binomial expansion;
perform operations with rational expressions using the mathematics they know from the field properties of rational numbers;
solve radical and rational equations and check their answers for extraneous roots;
find the intersection(s) of two graphs and explain why the x coordinates are the common solutions;
graph functions using important features and relationships of the graph.



Trigonometry of General Triangles and Trigonometric Functions:

Performance Descriptors

Mastery

Math III students at the mastery level in mathematics:
derive and apply the appropriate formulas to calculate accurately and efficiently the unknown measurements of any triangle;
use the radian measures of the unit circle in practical situations to explain how to calculate the arc length and determine trigonometric values;
use technology to explore and choose trigonometric functions to model periodic data using accurate parameters.

Mathematical Modeling:

Performance Descriptors

Mastery

Math III students at the mastery level in mathematics:
create equations and inequalities from words and use them to solve problems;
interpret the important features of a function in the context of the situation;
analyze different representations of a function in the context of the situation;
build functions by adding a constant function to another function and search for regularity or trends;
build functions by using transformations and search for regularity or trends;
use logarithms to represent exponential models and evaluate the logarithms using technology;
visualize relationships between cross-section and three-dimensional objects;
use ratios and proportions of similar figures to solve real world problems.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and it's academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

Nature and Application of Science:

SC.PD.11.1	Mastery
Biology students at the mastery level in the nature and applications of science:	
implement safe practices as they design, conduct, and revise experiments and base conclusions on observations and experimental evidence; and	
relate science-technology-societal issues while using a variety of sources to construct and defend their solutions.	

Students will:

- Demonstrate an understanding of history and nature of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate the ability to use the inquiry process to solve problems.
- Relate science-technology-societal issues while using a variety of sources to construct and defend their solutions.

Content of Science:

SC.PD.11.2	Mastery
Biology students at the mastery level in content of science:	
investigate the chemistry of cellular processes and biological molecules and relate structure to function in various cells, organisms, and viruses;	
analyze the flow of energy in cells, organisms, and the environment;	
analyze cellular reproduction processes and determine probable offspring by applying Mendel's Laws of Genetics;	
use DNA and RNA models to explain protein synthesis, mutations, and gene therapy, and determine how changing environmental factors disrupt the interrelationships of organisms within an ecosystem and alter energy flow.	

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories, and models as delineated in the objectives; demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



Operations and Algebraic Thinking:

Performance Descriptors	Mastery
First grade students at the mastery level in mathematics:	
analyze relationships between quantities in problem solving situations, use tools to represent the problem and determine the solution;	
flexibly apply different properties of operations to find sums and differences;	
use strategies to calculate accurately to 20 and fluently to 10;	
use the equal sign consistently and appropriately in number sentences and determine an unknown quantity.	

Geometry:

Performance Descriptors	Mastery
First grade students at the mastery level in mathematics:	
build and draw shapes with defining attributes, build new shapes from composite shapes, partition circles and rectangles into halves and fourths and use appropriate vocabulary to describe the results.	

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.



Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Number and Operations in Base 10:

Performance Descriptors	Mastery
First grade students at the mastery level in mathematics:	
count, read, represent and write numerals within 120;	
make sense of the quantities represented by each digit in any two-digit number and use symbols to express the comparison of any two two-digit numbers;	
use and explain strategies that reflect understanding of place value and properties of operations to add within 100 and subtract multiples of 10 from within 100 fluently.	

Measurement and Data:

Performance Descriptors	Mastery
First grade students at the mastery level in mathematics:	
compare and order three objects according to length measured accurately by the repeated use of a nonstandard unit;	
tell and write time using analog and digital clocks to the hour and half-hour;	
organize, represent and interpret data.	

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

PERFORMANCE DESCRIPTORS FOR MASTERY

2ND GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors

Mastery

Second grade students at mastery level in reading:

determine theme and describe how characters respond to major events and challenges in a multi-paragraph text; make connections across literary and informational texts and disciplines;

describe how words and phrases supply rhythm, meaning and the overall structure; acknowledge differences in point of view and identify author's purpose;

explain how images contribute to and clarify understanding; compare and contrast the key points in two or more versions of the same topic and describe how reasons support specific points the author makes;

read and comprehend literary and informational text in the grades 2-3 text complexity band proficiently with scaffolding as needed at the high end of the range;

distinguish long and short vowels when reading one-syllable words, know sound correspondences for vowel teams, identify words with inconsistent spelling, decode and spell two-syllable words with long vowels or affixes;

read on level prose and poetry accurately and fluently to support comprehension.

Writing:

Performance Descriptors

Mastery

Second grade students at mastery level in writing:

develop opinion and informative/explanatory texts introduce a topic, use facts and definitions to develop points, use linking verbs to connect ideas and provide a concluding statement or section;

write narratives that recount a well-elaborated event or sequence of events and describe actions, thoughts and feelings;

focus on a topic and strengthen writing as needed by revising, editing and publishing, using a variety of digital tools;

recall or gather information and answer questions to participate in shared research and writing projects.



Speaking and Listening:

Performance Descriptors

Mastery

Second grade students at mastery level in speaking and listening

link comments to remarks of others, recount or describe key ideas or details, clarify comprehension and deepen understanding.

They speak audibly to tell stories and create audio recordings with appropriate facts and descriptive details to provide clarification.

Language:

Performance Descriptors

Mastery

Second grade students at mastery level in language

use collective nouns, irregular plural nouns, pronouns, irregular verbs, adjectives and adverbs correctly; produce, expand and rearrange sentences; use apostrophes to form contractions and possessives; and consult reference materials as needed.

They use affixes, root words and meanings of individual words to determine the meaning of new words and compound words; consult reference sources for clarification; use adjectives and adverbs to describe.

10TH GRADE SOCIAL STUDIES

Geography:

Performance Descriptors

Mastery

Tenth grade students at mastery level in geography:

locate geographic features and interpret information using geographic tools;

compare essays, novels, poems, short stories, feature films, and songs that demonstrate how people express attachment to places and regions;

describe the geographic and regional differences during various eras of U.S. History (colonial era, Civil War, etc.);

explain the importance of the cultural contributions of all immigrants;

explain the connection between world resources and economic development; and

connect cultural settlement patterns with physical geography identifying significant historic events and movements.

Civics:

Performance Descriptors

Mastery

Tenth grade students performing at the mastery level in civics:

describe the changing roles of citizens and assess levels of civic involvement;

compare various public policies (current and historical);

evaluate the purposes and contributions of government and explain the events that led to constitutional democracy;

compare fundamental democratic values and principles of a constitutional democracy;

analyze conflicts between nations and propose resolutions;

evaluate the roles of citizens in a democracy reflected in active participation in government; and explain why you chose to participate in a volunteer project.

Economics:

Performance Descriptors

Mastery

Tenth grade students at mastery level in economics:

identify conflicts between colonies, mother country, regions, and business interests that eventually lead to the free enterprise system;

identify cause/effect relationships in economic change and evaluate the development of economic systems and trade patterns;

compare the development of economic theory based on Federalists' and Anti-Federalists' viewpoints;

compare the economic policy in the United States during each era (e.g., Colonial period, Revolutionary, Westward Expansion, Civil War, late 19th /early 20th Centuries);

determine reasons for the rise of labor unions as a result of industrialization and urbanization in the United States;

analyze and compare capitalism with other economic systems; and

evaluate the effects of the evolution of global economic interdependence prior to 1912.

Literacy:

Performance Descriptors

Mastery

Ninth and tenth grade students at mastery level in literacy:

cite textual evidence; summarize how key events or ideas develop; analyze events determining whether earlier events caused later ones;

determine the meaning of domain-specific vocabulary; compare the point of view of two or more authors;

integrate information, assess whether the reasoning and evidence support the author's claims;

read and comprehend history/social studies texts in the grades 9-10 text complexity band independently and proficiently;

compose arguments and informative/explanatory texts; manage the complexity of the topic appropriate to the discipline and context as well as the expertise of the audience;

use technology to develop, strengthen, publish and present clear and coherent writing focusing on what is most significant, linking to other information and displaying information;

conduct short and sustained research projects synthesizing multiple useful sources and integrate information selectively; avoid plagiarism; and

write over extended time frames for research-based projects and shorter time frames for a range of discipline-specific tasks, purposes and audiences.

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History:

Performance Descriptors

Mastery

Tenth grade students at mastery level in history:

analyze through the use of maps, charts and graphic organizers the religious, economic, social and political motives and results of European colonization in the North America;

interpret through an investigation the relationship between the creation of the United States and the ideas of the Enlightenment, the founding documents, and the events and challenges faced by the new nation;

categorize the various foreign and domestic impacts and political, economic, social, and religious challenges of Westward Expansion by the United States;

categorize the relationships between the social, geographic, political and economic causes, events and results of the Civil War and Reconstruction with charts, graphs, timelines, and other graphic organizers;

investigate key concepts and events that are reflected in the changes in the economic structure, society, politics and geography and their impact on the United States in the late 19th Century; and summarize the global role of the United States in the early 20th Century from a technological, political, social, and economic perspective.

Speaking and Listening

Mastery
Eleventh grade students at mastery level in speaking and listening:
initiate and participate in collaborative discussions on topics, texts and issues that probe reasoning and evidence and promote diverse creative perspectives; set deadlines; stimulate thoughtful exchange of ideas by posing and responding to questions from diverse perspectives; integrate multiple sources of information and verify or challenge ideas or conclusions in order to make decisions and solve problems; evaluate a speaker's reasoning, tone and emphasis; qualify or justify their own views and make new connections based on the evidence and reasoning presented; present information, findings and supporting evidence conveying clear and distinct perspective with substance and style appropriate to purpose, audience and task so listeners can follow the line of reasoning; make strategic use of digital media to enhance reasoning, understanding and interest; and adapt speech to a variety of contexts and informal and formal tasks addressing opposing perspectives.

Language

Mastery
Eleventh grade students at mastery level in language:
use colons to introduce quotations, use semi-colons, hyphenation and parallel structure; incorporate a variety of phrases and clauses for sentence variety and interest and understand that conventions are subject to change over time and are sometimes contested; apply knowledge of language to write and edit work appropriate for the discipline and writing type, understand how language functions in different contexts to make effective choices for meaning or style and vary syntax using references; conform to the guidelines of a style manual; clarify a word's usage and interpret figures of speech such as hyperbole and paradox in context and analyze their roles in the text with minimal scaffolding.

Reading

Mastery
Eleventh grade students at mastery level in reading:
objectively summarize and cite strong, thorough evidence to support analysis of connections and inferences; determine how two or more themes and central ideas build on one another to produce a complex account, are shaped and are refined by the order in which points are made; and how complex characters are developed and interact with other characters to advance the plot or develop the theme in literary and informational texts;
analyze cumulative impact of how author's ideas or claims are developed and refined by particular sentences, paragraphs or larger portions of text, how word choice affects and refines meaning and tone and how rhetoric, structure order of events, point of view and cultural experience are used to create various effects including satire, sarcasm, irony and understatement in literary and informational texts;
analyze and defend the representation of literary and informational text in two different artistic mediums, determining which details are emphasized in each account; analyze how an author draws on and transforms source material in literary work; evaluate specific claims and assess validity, relevancy and sufficiency of evidence in informational texts; and analyze seminal U.S. documents of historical and literary significance with a focus on American Literature and Early American historical documents;
read and comprehend literary and informational texts in the grades 11-12 text complexity band profitably with scaffolding as needed at the high end of the range.

Writing

Mastery
Eleventh grade students at mastery level in writing:
compose logical arguments and informative/explanatory texts in a tone that conveys ideas clearly and establishes the significance of claims, counterclaims, reasons, bias and relevant evidence using techniques such as metaphor, simile and analogy; write narratives that include well-chosen details to build toward a particular tone and outcome, situation or observation; and establish one or more points of view while creating a smooth well-structured progression of experiences or events using a variety of words to link sections of the text;
use technology to develop and strengthen writing by rewriting and trying new approaches; publish and update individual and shared projects using technology's capacity to link to other information and to display information flexibly and dynamically in response to ongoing feedback including new arguments or information;
effectively use advanced searches and narrow or broaden inquiry to conduct short as well as more sustained research projects or to solve a problem; explore multiple avenues, including informational and literary texts to support a research topic, analysis and reflection; assess the strength and limitation of the source and synthesize multiple print and digital sources in terms of task, purpose and audience; integrate information into the text selectively to maintain the flow of ideas; avoid plagiarism and citation;
write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences.



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Civics

Mastery
First grade students at mastery level in civics:
give examples of and classify civic responsibilities, privileges, rights, patriotism and patriotic symbols of the United States;
propose solutions to a local problem and volunteer to help; and
model behavior that demonstrates traits of good citizenship.

Geography

Mastery
First grade students at mastery level in geography:
locate the United States, West Virginia and major geographic features on a map utilizing appropriate global information systems;
describe the impact of climate and location on how people live;
read simple maps using cardinal directions, location, landforms and symbols in a legend;
sequence days, months and seasons; and
describe natural resources and their uses.

Economics

Mastery
First grade students at mastery level in economics:
categorize the major occupations of people in the community;
explain the difference between needs and wants and list possible consequences of economic choices; and
explain how individuals and families earn, spend and save money.

History

Mastery
First grade students at mastery level in history:
collect, organize and examine individual, family and community historical data to make comparisons to present-day living;
identify cultural contributions of families as portrayed through various sources; and
collect, organize and sequence personal data utilizing a timeline.

West Virginia History

Mastery
First grade students at mastery level in West Virginia Studies:
recite the state motto and sing the state song;
investigate and describe the common occupations of people in West Virginia;
locate West Virginia on a United States map; and
explain how games, toys, and various art forms reflect West Virginia culture.



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PERFORMANCE DESCRIPTORS FOR MASTERY

10TH GRADE SCIENCE

Nature of Science:

SC.PD.10.1

Mastery

Students analyze the importance of scientific innovation and relate these innovations to the utilization of scientific methodology, variability in experimental results to advances in societal, cultural and economic issues; design, conduct, communicate, evaluate and revise experiments utilizing safe procedures and appropriate technology; draw conclusions from multiple data sources and interpretation of models.

Students will:

- Demonstrate an understanding of history and nature of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate the ability to use the inquiry process to solve problems.

Application of Science:

SC.PD.10.3

Mastery

Students will construct, test and analyze data to explore systems, models, and changes across science disciplines; analyze technological innovations and identify the science that makes them possible; evaluate the personal and societal benefits of a scientific discovery; assess the impacts of a public policy decision regarding health, population resources or environmental issues.

Students will:

- Demonstrate the ability to use inquiry process to explore systems, models, and changes.
- Demonstrate an understanding of the interdependence between science and technology.
- Demonstrate an understanding of the utilization of technology to gather data and communicate designs, results and conclusions.
- Demonstrate an understanding of personal and societal benefits of science, and an understanding of public policy decisions as related to health, population, resource and environmental issues.

Content of Science:

SC.PD.10.2

Mastery

Students relate cell structure to function; apply DNA's structure to its role in heredity; compare ontogeny and phylogeny of an animal; compare traditional and modern classification systems; diagram biogeochemical cycles; describe how human body systems work together; describe fossil and modern adaptations of plant and animal populations to their changing environment; experimentally determine characteristics of substances; mathematically determine the relationships among temperature-pressure-volume and heat in substances during physical /chemical changes; characterize electromagnetic waves and their uses; describe the relationship between electricity and magnetism; quantitatively determine conservation of thermal energy; relate Newton's Laws of Motion to rate, force, momentum, work and time; calculate mechanical advantage of simple machines; compare the effect of different forces on vibrating systems; predict tidal phenomenon; determine impacts of geological and biological processes on climate; explain geological and biological processes of fossil formation; explain theories of cosmology using electromagnetic evidence.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology, earth/environmental science and astronomy.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



2ND GRADE MATHEMATICS

Operations and Algebraic Thinking:

Performance Descriptors

Mastery

Second grade students at the mastery level in mathematics:

make sense of quantities, relationships in problem situations, and represent symbolically to solve problem;

use various mental strategies and make use of patterns and structures to fluently compute sums and differences;

represent the sum of a group of objects as the repeated addition of equal addends.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Number and Operations in Base 10:

Performance Descriptors

Mastery

Second grade students at the mastery level in mathematics:

make sense of quantities within 1000 using place value to make comparisons and represent those relationships symbolically;

use strategies based on place value, properties of operations and number relationships to add and subtract numbers within 1000.

Geometry:

Performance Descriptors

Mastery

Second grade students at the mastery level in mathematics:

identify and draw shapes given attributes, partition rectangles using congruent squares and count the number of squares, use appropriate vocabulary while partitioning shapes into equal pieces and recognize equal shares may have different shapes.

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Measurement and Data:

Performance Descriptors

Mastery

Second grade students at the mastery level in mathematics:

estimate length of objects and select the correct tools to accurately measure and compare length;

solve addition and subtraction word problems within 100 involving length and represent quantities of length using number lines and drawings;

accurately tell and write time to the nearest five minutes on analog and digital clocks and solve word problems involving money;

collect and represent measurement data up to four categories and solve simple problems through the interpretation of the data presented.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

2ND GRADE SCIENCE

Nature of Science:

SC.PD.2.1

Mastery

Second grade students at the mastery level identify and discuss science careers in their community; design and conduct simple investigations using safe techniques; describe trends of data and make predictions; use scientific tools.

Students will:

- Demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers.
- Demonstrate the abilities and understanding necessary to do scientific inquiry.
- Demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.

Content of Science:

SC.PD.2.2

Mastery

Second grade students at the mastery level identify and explain various structures and functions in plants and animals; sequence illustrations of plant and animal life cycles and relate them to the human life cycle; compare and contrast habitats; identify physical properties and changes of matter; identify and demonstrate properties of light, heat, and magnetism; explore sound and compare the force and motion of objects; observe, identify and explain the changes in earth and the sky; describe and correlate fossils to original organisms.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories, and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



Application of Science:

SC.PD.2.3

Mastery

Second grade students at the mastery level identify how parts of a system interact; recognize and use models as representations of real things.

Students will:

- Identify how the parts of a system interact.
- Recognize and use models as representations of real things.
- Observe that changes occur gradually, repetitively, or randomly within the environment.
- Recognize that common objects and events incorporate science to solve human problems and enhance the quality of life.
- Demonstrate the ability to listen to, be tolerant of, and evaluate the impact of different points of view on health, population, resources and environmental practices while working in collaborative groups.

10TH GRADE MATHEMATICS

Quadratic Functions and Modeling:

Performance Descriptors

Mastery

Mathematics II students at the mastery level in mathematics:
sketch and interpret features of graphs and tables representing quantitative relationships; analyze various representations of functions to compare and contrast relationships between two functions;
write a function describing the relationship between two quantities;
determine the inverse of a function and the effect of various transformations of a function;
construct models to demonstrate that a quantity increasing exponentially eventually exceeds any quantity increasing as a polynomial function.

Circles with and without

Coordinates:

Performance Descriptors

Mastery

Mathematics II students at the mastery level in mathematics:
use definitions and theorems to prove properties of circles and identify and describe relationships between and among components of circles;
derive the relationship of the length of the arc intercepted by an angle to the radius and the formula for the area of a sector;
derive the equations given specific components of the circle and parabola (other conics are addressed in future math classes);
use coordinates to prove simple geometric theorems algebraically;
construct informal arguments for formulas relating to circles, cylinders, pyramids and cones and solve problems.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Similarity, Right Triangle Trigonometry, and Proof:

Performance Descriptors

Mastery

Mathematics II students at the mastery level in mathematics:
verify properties of dilations and use transformations to conjecture, develop and explain properties of similar triangles;
understand and use stated assumptions, definitions, and previously established results in proving geometric theorems;
understand and use stated assumptions, definitions, and previously established results in proving geometric theorems involving similarity in proving relationships in geometric figures;
determine the point on segment that partitions the segment in a given ratio;
solve for missing parts of right triangles;
prove the Pythagorean identity and use it to determine values of other trigonometric functions.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Application of Science:

SC.PD.2.3

Mastery

Second grade students at the mastery level identify how parts of a system interact; recognize and use models as representations of real things.

Students will:

- Identify how the parts of a system interact.
- Recognize and use models as representations of real things.
- Observe that changes occur gradually, repetitively, or randomly within the environment.
- Recognize that common objects and events incorporate science to solve human problems and enhance the quality of life.
- Demonstrate the ability to listen to, be tolerant of, and evaluate the impact of different points of view on health, population, resources and environmental practices while working in collaborative groups.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

Applications of Probability:

Performance Descriptors

Mastery

Mathematics II students at the mastery level in mathematics:
analyze sets of data to draw conclusions about the probability type indicated;
apply the rules of probability to compute probability for compound events;
analyze situations and use knowledge of probability to make fair decisions.

Expressions and Equations:

Performance Descriptors

Mastery

Mathematics II students at the mastery level in mathematics:
deconstruct, identify and interpret parts of an algebraic expression in order to rewrite the expression;
produce equivalent forms of quadratic expressions in order to identify and make sense of expression properties;
create equations and inequalities to solve problems and to represent relationships between quantities;
plan, develop and apply a solution pathway to quadratic equations that may have complex solutions;
demonstrate that polynomial identities extend analogously to include the complex number system;
solve special systems of equations in two variables.

PERFORMANCE DESCRIPTORS FOR MASTERY

10TH GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors

Mastery

Tenth grade students at mastery level in reading:

objectively summarize and cite strong, thorough evidence to support analysis of connections and inferences; how the theme and central ideas emerge, are shaped and are refined by the order in which points are made; how complex characters are developed and interact with other characters to advance the plot or develop the theme in literary and informational texts;

read and analyze cumulative impact of how author's ideas or claims are developed and refined by particular sentences, paragraphs or larger portions of text, how word choice affects meaning and tone and how rhetoric, structure order of events, point of view and cultural experience are used to create various effects in literary and informational texts;

analyze and defend the representation of literary and informational text in two different artistic mediums, determining which details are emphasized in each account; analyze how an author draws on and transforms source material in literary work; evaluate specific claims and assess validity, relevancy and sufficiency of evidence in informational texts; analyze seminal U.S. documents of historical and literary significance;

read and comprehend literary and informational texts in the grades 9-10 text complexity band independently and proficiently.

Writing:

Performance Descriptors

Mastery

Tenth grade students at mastery level in writing:

compose logical arguments and informative/explanatory texts in a tone that conveys ideas clearly and shows clear relationships among claims, counterclaims, reasons and relevant evidence; write narratives that include well-chosen details to outline a problem, situation or observation; and establish one or more points of view while creating a smooth well-structured progression of experiences or events using a variety of words to link sections of the text;

use technology to develop and strengthen writing by rewriting and trying new approaches; publish and update individual and shared projects using technology's capacity to link to other information and to display information flexibly and dynamically in response to ongoing feedback;

effectively use advanced searches and narrow or broaden inquiry to conduct short as well as more sustained research projects or to solve a problem; explore multiple avenues, including informational and literary texts to support a research topic, analysis and reflection; assess the authority and synthesize multiple print and digital sources in terms of task, purpose and audience; integrate information into the text selectively to maintain the flow of ideas; avoid plagiarism; and use standard citation;

write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences.

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Service Agencies

RESA

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Speaking and Listening:

Performance Descriptors

Mastery

Tenth grade students at mastery level in speaking and listening:

initiate and participate in collaborative discussions on topics, texts and issues, building on the ideas of others; set deadlines; stimulate thoughtful exchange of ideas by posing and responding to questions from diverse perspectives; integrate multiple sources of information and verify or challenge ideas or conclusions in order to make decisions and solve problems; evaluate a speaker's reasoning; qualify or justify their own views and make new connections based on the evidence and reasoning presented;

present information, findings and supporting evidence conveying clear and distinct perspective with substance and style appropriate to purpose, audience and task so listeners can follow the line of reasoning; make strategic use of digital media to enhance reasoning, understanding and interest; and adapt speech to a variety of contexts and tasks.

Language:

Performance Descriptors

Mastery

Tenth grade students at mastery level in language:

use colons to introduce quotations, semi-colons and parallel structure; incorporate a variety of phrases and clauses for sentence variety and interest;

apply knowledge of language to write and edit work appropriate for the discipline and writing type, understand how language functions in different contexts to make effective choices for meaning or style; conform to the guidelines of a style manual;

clarify etymology and interpret figures of speech such as euphemism and oxymoron in context and analyze their roles in the text independently and proficiently.

2ND GRADE SOCIAL STUDIES

Geography:

Performance Descriptors

Mastery

Second grade students at mastery level in geography:

identify continents, oceans, major geographic features and specific locations utilizing appropriate global information systems;

summarize how climate, location and physical surroundings have caused changes in the community and state over time;

utilize a compass rose, a map legend and cardinal directions to find specific locations; and

classify examples of natural resources and how people use them.

Civics:

Performance Descriptors

Mastery

Second grade students at mastery level in civics:

compare and contrast rules and laws and assess their fairness;

illustrate the three levels of government (local, state and national);

discuss the characteristics of effective leadership;

model good citizenship, patriotism and participate in a volunteer project;

create a product that reflects diversity in American culture; and

give examples of symbols, icons, and traditions of the United States, recite correctly the Pledge of Allegiance, and participate in national celebrations.

Economics:

Performance Descriptors

Mastery

Second grade students at mastery level in economics:

research various occupations and career opportunities and how they have changed within the state and nation;

categorize needs, wants and the consequences of these choices by utilizing a system of exchange of goods and services; and

examine the role of banks in saving for the future and create a savings chart.

West Virginia History:

Performance Descriptors

Mastery

Second grade students at mastery level in West Virginia Studies:

identify important state symbols, celebrations, holidays, famous West Virginians and the governor of our state;

locate West Virginia's natural resources and geographic features on a map;

locate county seat, the state capital city and bordering states on a map;

compare and contrast past and present lifestyles of West Virginians and examine the cultural life through storytelling and various art forms.

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History:

Performance Descriptors

Mastery

Second grade students at mastery level in history:

create timelines that document family and community change; and

describe the influence of people, events and cultures on the development of communities in the United States.

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PERFORMANCE DESCRIPTORS FOR MASTERY

3RD GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors	Mastery
Third grade students at mastery level in reading:	refer explicitly to the text as the basis for answers, determine main idea, explain how it is conveyed /supported through key details and how actions and relationships contribute to events using language that pertains to time, sequence and cause and effect;
	determine word meaning distinguishing literal / nonliteral language, describe how parts of a literary text build on previous sections, use search tools to locate relevant information and distinguish own point of view from that of author;
	explain how illustrations contribute to what is conveyed through text and use information gained from illustrations and words to demonstrate understanding, describe connections between sentences and paragraphs, compare and contrast story elements in literary texts by the same author and key details presented in two informational texts on the same topic;
	read and comprehend literary and informational text in the grades 2-3 text complexity band independently and proficiently;
	know the meaning of most common affixes and decode multisyllabic words and words with Latin suffixes;
	read on level prose and poetry accurately and fluently to support comprehension.

Writing:

Performance Descriptors	Mastery
Third grade students at mastery level in writing:	develop opinion and informative/explanatory text; create an organizational structure that supports a point of view or opinion by listing reasons and details and by using phrases to connect ideas within categories while conveying ideas and information clearly; write narratives to develop real or imagined experiences or event sequences using effective technique, descriptive details, transitional phrases and dialogue to establish a situation and introduce a narrator and/or characters;
	use technology to interact and collaborate with others to plan organize develop and publish writing appropriate to task and purpose with guidance and support from adults and peers;
	conduct short research projects that build knowledge about a topic, take notes from print and digital sources and sort information into provided categories;
	write routinely over short and extended time frames for a range of discipline-specific tasks, purposes and audiences.

Speaking and Listening:

Performance Descriptors	Mastery
Third grade students at mastery level in speaking and listening:	come to discussions prepared to stay on topic, explore ideas, check understanding, link and explain their own ideas, determine main ideas and supporting details presented visually, quantitatively and orally while offering elaboration and detail;
	report on a topic or text and create engaging recordings while speaking clearly at an understandable pace and emphasizing or enhancing certain facts or details with visual displays.
	Third grade students at mastery level in language:
	explain the functions of nouns, pronouns, verbs, adjectives, adverbs and conjunctions in sentences and produce complex sentences with subject-verb and pronoun–antecedent agreement;
	choose words and phrases for effect and recognize differences between conventions of spoken and written standard English;
	distinguish the literal / nonliteral meanings and shades of meaning among related words that describe states of mind or degrees of certainty while acquiring and using conversational, general academic and domain-specific vocabulary.

Geography:

Performance Descriptors	Mastery
Ninth grade students at mastery level in geography:	analyze geographic features and interpret information using geographic tools; and
	explain the connection between world resources and economic development.

Literacy:

Performance Descriptors	Mastery
Ninth and tenth grade students at mastery level in literacy:	

cite textual evidence; summarize how key events or ideas develop; analyze events determining whether earlier events caused later ones;

determine the meaning of domain-specific vocabulary; compare the point of view of two or more authors;

integrate information, assess whether the reasoning and evidence support the author's claims;

read and comprehend history/social studies texts in the grades 9-10 text complexity band independently and proficiently;

compose arguments and informative/explanatory texts; manage the complexity of the topic appropriate to the discipline and context as well as the expertise of the audience;

use technology to develop, strengthen, publish and present clear and coherent writing focusing on what is most significant, linking to other information and displaying information;

conduct short and sustained research projects synthesizing multiple useful sources and integrate information selectively; avoid plagiarism; and

write over extended time frames for research-based projects and shorter time frames for a range of discipline-specific tasks, purposes and audiences.

Civics:

Performance Descriptors	Mastery
Ninth grade students at mastery level in civics:	describe citizens demonstrating the roles, rights, and responsibilities of all;
	explain various ways of organizing government and the purpose of government; and
	examine and categorize world aid organizations and the importance of global volunteerism.



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History:

Performance Descriptors	Mastery
Ninth grade students at mastery level in economics:	define scarcity demonstrating the role of opportunity costs, and discussing resource allocation;
	identify cause/effect relationships in economic change and evaluate the development of economic systems and trade patterns; and
	summarize the effects of the evolution of global economic interdependence prior to 1900.

Performance Descriptors	Mastery
Ninth grade students performing at mastery level in history:	explain emergence of civilization, culture and the interaction of man and the environment citing examples;
	analyze the ancient and classical civilizations and the progress of those civilizations;
	examine and differentiate between the major world religions and philosophies;
	explain the societies of the Middle Ages and give examples of their influence on social, political, and economic issues;
	illustrate the changes brought about by the Renaissance, Reformation, Exploration, and the Enlightenment;
	outline and explain the concept of change over time in relation to the revolutions in the sixteenth through nineteenth centuries; and
	analyze the contributions of significant groups, individuals, places, documents, and events from ancient times until 1900.

PERFORMANCE DESCRIPTORS FOR MASTERY

3RD GRADE SCIENCE

Nature of Science:

SC.PD.3.1

Mastery

Third grade students at mastery level study scientists from different cultures and backgrounds and identify their discoveries; recognize that scientific explanations lead to new discoveries; plan and conduct simple investigations using safe techniques; interpret and present data; control variables, and explore science careers in the community.

Students will:

- Demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers.
- Demonstrate the abilities and understanding necessary to do scientific inquiries.
- Demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.

Content of Science:

SC.PD.3.2

Mastery

Third grade students at the mastery level compare the physical characteristics, structures, and behaviors of living things and explain how they function, change and adapt to their environment; identify physical and chemical properties of matter including density and changes in states of matter; investigate the properties of light energy; recognize the principles of force and motion and identify examples of potential and kinetic energy; examine the relationship between speed, distance and time; explore and describe how erosion, volcanoes, and earthquakes change Earth's surface; identify fossils as a record of time; describe the relative movement of the earth and moon in relation to the sun; describe the planets; identify the composition of rocks and explain how they are formed; compare and contrast layers of the Earth; identify geographical features using a model or map.

Students will:

- Demonstrate knowledge, understanding of application of scientific facts, concepts, principles, theories, and models delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- apply knowledge, understanding and skills of science subject matter / concepts to daily life experiences.



Application of Science:

SC.PD.3.3

Mastery

Third grade students at mastery level identify how parts of a system interact; recognize and use models as representations of real things; observe and identify patterns of change, consistency or regularity within the environment; cite examples of science and technology in daily events; demonstrate tolerance of different points of view.

Students will:

- Identify how the parts of a system interact.
- Recognize and use models as representations of real things.
- Observe and identify patterns of change, consistency or regularity within the environment.
- Demonstrate the ability to utilize technology to gather and organize data to communicate designs, results and conclusions.
- Identify that a solution to a problem often creates new problems.
- Demonstrate the ability to listen to, be tolerant of, and evaluate the impact of different points of view on health, population, resources and environmental practices while working in collaborative groups.

9TH GRADE MATHEMATICS

Relationships Between Quantities:

Performance Descriptors

Mastery

Mathematics I students at the mastery level in mathematics:
use unit analysis to determine procedures to solve problems; express numerical answers with a degree of precision appropriate for the problem context;
interpret expressions in the context of a problem;
analyze the relationship between quantities, recognizing constraints, in problem situations and represent them as equations and inequalities to solve problems.

Congruence, Proof, and Constructions:

Performance Descriptors

Mastery

Mathematics I students at the mastery level in mathematics:
know precise definitions; perform and describe a sequence of transformations;
use transformations of rigid motion to develop and explain the definition of congruence;
make formal geometric constructions with a variety of tools.



Descriptive Statistics:

Performance Descriptors

Mastery

Mathematics I students at the mastery level in mathematics:
create single-variable data displays and identify appropriate statistical measures to compare, summarize, and interpret data;
create data displays for two variables and use them to describe associations and trends;
interpret linear models in the context of the data;
distinguish between correlation and causation.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Reasoning with Equations:

Performance Descriptors

Mastery

Mathematics I students at the mastery level in mathematics:
use algebraic properties to justify each step in a simple equation;
solve and interpret solutions to inequalities in one variable; solve literal equations;
solve systems of equations, justifying that the solution pathway is mathematically valid.

Linear and Exponential Relationships:

Performance Descriptors

Mastery

Mathematics I students at the mastery level in mathematics:
strategically use appropriate tools to generate and interpret graphical representations in order to solve equations and inequalities;
demonstrate understanding of the meaning of function, including as it relates to sequences; contextually use and interpret statements written in function notation;
interpret key features of a function in terms of context from any of its various representations; compare key features of two functions that are displayed using different representations;
analyze the relationship between two quantities to write the function that models it;
identify the connections between patterns in transformations and in the related function notation;
distinguish between the identifying features of linear and exponential functions; write a function, given any of its representations, to solve a problem;
interpret the contextual parameters of a function.

Connecting Algebra and Geometry through Coordinates:

Performance Descriptors

Mastery

Mathematics I students at the mastery level in mathematics:
use geometric definitions and the coordinate plane to prove simple theorems and to solve related problems.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

9TH GRADE SCIENCE

Nature of Science:

SC.PD.9.1	Mastery
Students analyze the importance of scientific innovation and relate these innovations to the utilization of scientific methodology, variability in experimental results to advances in societal, cultural and economic issues; design, conduct, communicate, evaluate and revise experiments utilizing safe procedures and appropriate technology; draw conclusions from multiple data sources and interpretation of models.	

Students will:

- Demonstrate an understanding of history and nature of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate the ability to use the inquiry process to solve problems.

Content of Science:

SC.PD.9.2	Mastery
Students perform and interpret monohybrid crosses; design environments to model independent populations; compare cells, tissues and systems of different organisms; trace matter and energy through cellular processes; relate state of matter to amount of kinetic energy; write formulas, balance coefficients, and classify types of chemical reactions; classify bond types; predict density value when mass and/or volume changes; compare types of nuclear changes; assess a material's ability to absorb or dissipate heat; explore properties of a magnet; construct an electric circuit using Ohm's Law and power equation; recognize inverse square relations; examine variables that affect the motion of pendulums; differentiate transverse and longitudinal waves; predict weather using maps; relate properties to minerals; relate rocks to the environment in which they form; use evidence to interpret Earth's structure; compare and contrast the forces and mechanisms of plate tectonics; use dating techniques.	

Students will:

- Demonstrate knowledge understanding and applications of scientific facts, concepts, principles, theories, and models delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology, earth/ environmental science, and astronomy; and apply knowledge, understanding and skills of science subject matter/concepts to daily life.



west virginia content standards & objectives

Students will:

- Demonstrate the ability to use inquiry process to explore systems, models, and changes.
- Demonstrate an understanding of the interdependence between science and technology.
- Demonstrate an understanding of the utilization of technology to gather data and communicate designs, results and conclusions.
- Demonstrate an understanding of personal and societal benefits of science, and an understanding of public policy decisions as related to health, population, resource and environmental issues.

Application of Science:

SC.PD.9.3	Mastery
Students test, record and analyze data to explore systems, models, and changes; analyze a technological innovation and identify the science that makes it possible; assess positive outcomes and unintended consequences of a scientific discovery; explain the impacts of a public policy decision regarding health, population resources or environmental issues.	

3RD GRADE MATHEMATICS

Operations and Algebraic Thinking:

Performance Descriptors	Mastery
Third grade students at the mastery level in mathematics: interpret products and whole-number quotients of whole numbers and solve problems involving unknowns using multiplication and division; apply properties of operations to solve multiplication, unknown factor, and division problems; use strategies to fluently multiply and divide within 100; use the four operations and arithmetic patterns to solve two-step word problems and use estimation to check reasonableness of answers.	

Number and Operations - Fractions:

Performance Descriptors	Mastery
Third grade students at the mastery level in mathematics: make sense of fractions as equal parts of a whole or points on a number line, explain equivalent fractions and compare fractions using various criteria and symbols.	

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.



west virginia content standards & objectives

Geometry:

Performance Descriptors	Mastery
Third grade students at the mastery level in mathematics: classify and describe shapes by attributes showing that some groups overlap; model equal parts of various shapes to express the part as a fraction of the whole	

Mathematical Practices:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Measurement and Data:

Performance Descriptors	Mastery
Third grade students at the mastery level in mathematics: apply understanding of place value when rounding whole numbers, relate addition and subtraction using properties of operations and multiply one-digit numbers by multiples of ten.	

Number and Operations in Base 10:

Performance Descriptors	Mastery
Third grade students at the mastery level in mathematics: solve problems using measuring and estimating of liquid volume, object mass, and intervals of time to the nearest minute; create and use graphs to solve one- and two-step problems comparing data; measure objects to the nearest ½ or ¼ inch and create a line plot; explain how area is determined in more than one way and area's relationship to addition and multiplication; find perimeters of real-world plane figures specifying linear units and create rectangles with the same area and different perimeters and vice versa.	

Literacy Shifts in All Content Areas:

- Regular practice with complex text and it's academic language.
- Reading, writing and speaking grounded in evidence from text, both literary and informational.
- Building knowledge through content-rich nonfiction.

PERFORMANCE DESCRIPTORS FOR MASTERY

9TH GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors
Mastery
Ninth grade students at mastery reading:
objectively summarize and cite strong, thorough evidence to support analysis of connections and inferences; analyze the effectiveness of theme development, author's craft and how complex characters unfold in literary and informational texts;
analyze cumulative impact of how author's craft, rhetoric, structure and point of view contribute to text development, tone, style, suspense and humor; analyze point of view or cultural experience reflected in a wide range of world literature and informational text;
analyze the representation of literary and informational text in two different artistic mediums, determining which details are emphasized in each account; analyze how an author draws on and transforms source material in literary work; evaluate specific claims and assess validity, relevancy and sufficiency of evidence in informational texts; analyze seminal U.S. documents of historical and literary significance;
read and comprehend literary and informational texts in the grades 9-10 text complexity band proficiently with scaffolding as needed at the high end of the range.

Writing:

Performance Descriptors
Mastery
Ninth grade students at mastery level in writing:
compose logical arguments and informative/explanatory texts in a tone that conveys ideas clearly and shows clear relationships among claims, counterclaims, reasons and evidence; write narratives that include well-chosen details to outline a problem, situation or observation; and establish one or more points of view while creating a smooth well-structured progression of experiences or events;
use technology to develop and strengthen writing by rewriting and trying new approaches; publish and update individual and shared projects using technology's capacity to link to other information and to display information flexibly and dynamically;
effectively use advanced searches and narrow or broaden inquiry to conduct short as well as more sustained research projects or to solve a problem; explore multiple avenues, including informational and literary texts, to support a research topic, analysis and reflection; assess the authority and synthesize multiple print and digital sources, integrate information into the text selectively to maintain the flow of ideas, avoid plagiarism and use standard citation;
write over extended time frames for research-based projects and shorter time frames for specific tasks purposes and audiences.

Speaking and Listening:

Performance Descriptors
Mastery
Ninth grade students at mastery level in speaking and listening:
initiate and participate in collaborative discussions on topics, texts and issues, building on the ideas of others; set deadlines; stimulate thoughtful exchange of ideas by posing and responding to questions from diverse perspectives; integrate multiple sources of information and verify or challenge ideas or conclusions; evaluate a speaker's reasoning; qualify or justify their own views and make new connections based on the evidence and reasoning presented;
present information, findings and supporting evidence clearly, concisely and logically with substance and style appropriate to purpose, audience and task so listeners can follow the line of reasoning; make strategic use of digital media to enhance reasoning, understanding and interest; and adapt speech to a variety of contexts and tasks.

Language:

Performance Descriptors
Mastery
Ninth grade students at mastery level in language:
use colons, semi-colons and parallel structure; incorporate a variety of phrases and clauses for sentence variety and interest;
apply knowledge of language to write and edit work, understand how language functions in different contexts to make effective choices for meaning or style; conform to the guidelines of a style manual;
clarify etymology and interpret figures of speech such as euphemism and oxymoron in context and analyze their roles in the text with minimal scaffolding.



3RD GRADE SOCIAL STUDIES

Geography:

Performance Descriptors
Mastery
Third grade students at mastery level in geography:
label borders, latitude and longitude lines, map scale, equator, poles, Prime Meridian, Tropic of Cancer, Tropic of Capricorn, cardinal directions, intermediate directions, continents, oceans and time zones of North America on a map;
locate world geographic features;
compare regions of the United States in regard to plant and animal life, landforms, climate and human interactions with the environment;
identify and chart the journey of major explorers on a world map; and
use a legend to identify features on various types of maps and global information systems.

Civics:

Performance Descriptors
Mastery
Third grade students at mastery level in civics:
provide examples of and explain democratic values and beliefs; practice principles of good citizenship and respect for diversity;
compare and contrast basic forms of government and their impact on society;
examine customs of one's own society and determine the cultural origin;
describe historical conflicts and discuss their resolutions;
examine how the rights and responsibilities of citizens are reflected in patriotic symbols, songs and holidays; and
participate in a community service project, and determine how working together can improve lives and communities.

Economics:

Performance Descriptors
Mastery
Third grade students at mastery level in economics:
explain banking services and create a mock budget;
illustrate understanding of goods and services, supply and demand and scarcity of resources through the creation and interpretation of graphs;
sequence the path of raw material to a finished product;
relate occupations of given regions based on the natural resources using graphic resources; and
compare pricing strategies and advertising with product demand.

West Virginia History:

Performance Descriptors
Mastery
Third grade students at mastery level in West Virginia Studies:
use a grid system to locate West Virginia counties and county seats, bordering states and selected items;
identify the four physical geographic regions and the major communities within each region and describe the natural resource location and physical geography of each region; and
investigate points of interest in the tourist regions of West Virginia.

History:

Performance Descriptors
Mastery
Third grade students at mastery level in history:
use artifacts and historical pictures to compare and contrast the cultures of various Native American groups based on their geographic locations; and
determine the cause and effect of European exploration based on their motives, the information gained and the impact on Native Americans and the world.

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PERFORMANCE DESCRIPTORS FOR MASTERY

4TH GRADE ENGLISH LANGUAGE ARTS

Speaking and Listening:

Mastery
Fourth grade students at mastery level in speaking and listening:
carry out assigned roles while posing and responding to specific questions to clarify or follow up on information, make comments that contribute to the discussion and paraphrase portions of the presentation to review key ideas and supporting details;
add appropriate audio and visual displays to presentations to enhance development and to support main ideas or themes in an organized manner and differentiate between formal and informal situations.

Language:

Mastery
Fourth grade students at mastery level in language:
form and use relative pronouns and adverbs; conjunctions and prepositional phrases to produce correct and complete sentences; correct sentence fragments, run-ons and frequently confused words;
convey ideas precisely, choose punctuation for effect and differentiate between formal and informal situations;
use common Greek and Latin affixes and roots to determine meaning; consult reference materials to find the pronunciation and precise meaning of key words; demonstrate understanding of figurative language, synonyms and antonyms; acquire and use words and phrases that signal precise actions, emotions or states of being.

Reading:

Mastery
Fourth grade students at mastery level in reading:
refer to text to summarize, infer and determine main idea or theme; draw on specific, in-depth details to explain how inferences, main idea and theme are supported;
allude to characters in mythology, use structural elements to explain major differences between poems, drama and prose and between events, procedures, ideas and concepts in a text;
compare and contrast different accounts considering focus and information;
make connections between different texts;
identify specific descriptions and directions, compare and contrast similar themes, topics and patterns of events and interpret inferences and explain how they contribute to understandings; integrate information from two texts on the same topic in order to speak and write knowledgeably;
read and comprehend literary and informational text in the grades 4-5 text complexity band proficiently with scaffolding needed at the high end of the range;
use knowledge of letter-sound correspondences, syllabication patterns and morphology to read multisyllabic words in and out of context;
read on level prose and poetry accurately and fluently to support comprehension.

Writing:

Mastery
Fourth grade students at mastery level in writing:
develop opinion and informative/explanatory texts clearly in which supporting facts, concrete details and quotations related to the topic are grouped in paragraphs and sections linked within categories to support the writer's purpose; use precise language and domain-specific vocabulary; write narratives that orient the reader by establishing a situation; use concrete words and phrases, sensory details and transitional words and phrases to convey the sequence of events; provide a logical conclusion;
use the Internet and sufficient keyboarding skills to produce and publish clear and coherent writings appropriate to audience;
investigate different aspects of a topic to categorize relevant information drawn from literary and informational texts to support analysts, reflection and research; provide a list of sources;
write routinely over short and extended time frames for a range of discipline-specific tasks, purposes and audiences.



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Civics:

Mastery
Eight grade students at mastery level in civics:
demonstrate patriotism and evaluate how citizens participate in local, state and national government by analyzing their rights and responsibilities;
differentiate between the powers of each branch of government, state and national, cite the elected officials at each level and the requirements and responsibilities of their office;
explain the process for amending the West Virginia Constitution and for a bill becoming a law, assuming the role of a legislator in a simulation;
analyze the function of local, county, state and national governments, federal, state, local and special courts and identify various types of elections.



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Literacy:

Mastery
Eight grade students at mastery level in geography:
label the four major physical geographic regions, major rivers, landforms, natural/manmade borders, points of interest, counties and bordering states on selected maps and correlate the reasons for the development of the major cities in their respective locations;
investigate climate, landforms, natural resources and population density in West Virginia's geographical regions using special purpose maps and evaluate the impact on people's lives and settlement patterns and summarize how the cultural isolation of West Virginia has been affected through technological advances;
classify the geographic factors that led to development of agriculture, coal, glass, chemical, metallurgic and tourism industries in West Virginia;
interpret facts about West Virginia from various types of charts, graphs, maps, pictures, and models;
provide exact location and relative location to explain West Virginia's position on a variety of maps and globes by using correct geographic vocabulary and graphic displays; and
identify the nine distinct tourist regions in the state of West Virginia and analyze which geographic factors influence each region.

Performance Descriptors

Mastery

Sixth through eighth grade students at mastery level in literacy:

determine central ideas and cite textual evidence; provide an accurate summary; identify key steps in a process related to history/social studies;

determine the meaning of domain-specific vocabulary; identify an author's point of view or purpose;

integrate visual information; distinguish among fact, opinion and reasoned judgment; analyze the relationship between primary and secondary sources;

read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently;

compose arguments and informative/explanatory texts; use precise language and domain-specific vocabulary;

with some guidance and support, use technology to develop, strengthen, publish and present clear and coherent writing;

conduct short research projects drawing on several relevant, credible, and accurate sources; avoid plagiarism; and

write over extended time frames for research-based projects and shorter time frames for a range of discipline-specific tasks, purposes and audiences.

8TH GRADE SOCIAL STUDIES

Civics:

Mastery
Eight grade students at mastery level in civics:
demonstrate patriotism and evaluate how citizens participate in local, state and national government by analyzing their rights and responsibilities;
differentiate between the powers of each branch of government, state and national, cite the elected officials at each level and the requirements and responsibilities of their office;
explain the process for amending the West Virginia Constitution and for a bill becoming a law, assuming the role of a legislator in a simulation;
analyze the function of local, county, state and national governments, federal, state, local and special courts and identify various types of elections.



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Economics:

Mastery
Eight grade students at mastery level in economics:
compare and contrast West Virginia's role in the global economy to the economic role of other states;
compare and contrast West Virginia's economic conditions to those of other states;
analyze the impact of past and current economic conditions on economic growth of West Virginia;
investigate the effects of changes in the economies of the four regions of West Virginia; and
compare and contrast the effects of technological/industrial advancements in West Virginia to their effects in other states.

History:

Mastery
Eight grade students at mastery level in history:
explain the effects of European exploration on the various Native American cultures in western Virginia;
compare and contrast the various roles of western Virginians during the American Revolution, compare and contrast the military strategies of the North and South and describe the effects of significant contributions of West Virginia men and women;
identify the types of transportation that facilitated the growth of West Virginia and compare and contrast the West Virginia Constitutions;
summarize the evolution of the labor movement, and the political, social and economic situation in West Virginia following World War I;
summarize the economic and industrial growth of West Virginia during WWI, evaluate and analyze the impact of social, economic and echnological developments on the culture of West Virginia;
analyze the economic, social and political impact of the late 20th century and 21st century events on West Virginia; and
explain the importance of major fairs and festivals to West Virginia.

PERFORMANCE DESCRIPTORS FOR MASTERY

4TH GRADE SCIENCE

Nature of Science:

SC.PD.4.1

Mastery

Fourth grade students at the mastery level recognize that new discoveries lead to changes in scientific knowledge; interpret data and draw and support conclusions; make predictions and inferences based on patterns of evidence; design simple experiments using safe techniques, and support conclusions with evidence found through research.

Students will:

- Demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers.
- Demonstrate the abilities and understanding necessary to do scientific inquiry.
- Demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.

Application of Science:

SC.PD.4.3

Mastery

Fourth grade students at the mastery level identify how parts of a system interact; recognize and create models as representations of real things; observe and identify patterns of change, consistency or regularity within the environment; apply technology to solve problems, gather and communicate data; demonstrate tolerance of different points of view.

Students will:

- Identify how the parts of a system interact.
- Recognize and use models as representations of real things.
- Observe and identify patterns of change, consistency or regularity within the environment.
- Demonstrate the ability to utilize technology to gather and organize data to communicate designs, results and conclusions.
- Identify that a solution to a problem often creates new problems.
- Demonstrate the ability to listen to, be tolerant of, and evaluate the impact of different points of view on health, population, resources and environmental practices while working in collaborative groups.

Content of Science:

SC.PD.4.2

Mastery

Fourth grade students at the mastery level observe and distinguish characteristics, variation, and life cycles of organisms and how they interact within the environment; construct and explain models of habitats, food chains, and food webs; investigate and describe various properties of matter including states of matter, physical and chemical properties/changes; describe energy transformations, investigate conductors / nonconductors and electrical circuits, predict and investigate motion/force, and frequency/pitch; describe earth's geological composition and how it changes; differentiate between types of rocks; compare ocean/fresh water; identify and describe objects within the universe and their movement.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories, and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



8TH GRADE MATHEMATICS

Expressions and Equations:

Performance Descriptors

Mastery

Eighth grade students at the mastery level in mathematics:

generate equivalent numerical expressions from expressions involving integer exponents, use radicals to express square and cube roots and use scientific notation to express very large or small numbers and perform operations with numbers expressed in scientific notation;

make sense of proportional relationships and their representation in the equation and graph of a linear equation; discern a pattern between the equation $y = mx + b$ and the graph of a line;

analyze linear equations and pairs of simultaneous linear equations to solve mathematical problems and interpret the results in context.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Functions:

Performance Descriptors

Mastery

Eighth grade students at the mastery level in mathematics:

fluently interpret multiple representations of functions to make sense of their properties in problem situations, discern the structure and patterns of linear and non-linear functions;

construct and model the relationships between quantities in linear functions, with emphasis on the rate and initial value, and communicate the qualitative relationship between the variables in functions.

The Number System:

Performance Descriptors

Mastery

Eighth grade students at the mastery level in mathematics:

make, use and compare approximations of irrational numbers and locate on a number line.

Geometry:

Performance Descriptors

Mastery

Eighth grade students at the mastery level in mathematics:

use the properties of transformations to understand and connect to congruence and similarity of two-dimensional figures, and to angles created by parallel lines cut by a transversal and triangles;

make sense of and communicate the relationship between the legs of a right triangle and its hypotenuse, and use the Pythagorean Theorem in real-world, coordinate plane, and mathematical problems;

understand and apply the volume formulas to solve real-world and mathematical problems involving cones, cylinders and spheres.

Statistics and Probability:

Performance Descriptors

Mastery

Eighth grade students at the mastery level in mathematics:

make sense of bivariate measurement data and their relationship by constructing scatter plots; communicate the meaning of the data display and if a linear relationship exists, informally fit a line to the data; make sense of categorical data by making two-way tables and communicate the meaning of any association.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

Nature of Science:

SC.PD.8.1
Mastery
Eighth grade students at the mastery level recognize the importance of scientific innovation and report the role of these innovations in advancing societal, cultural and economic issues;
use scientific methodology to conduct and communicate experiments utilizing safe procedures and appropriate technology;
repeat experiments to verify results; draw conclusions from a data source or model.

Students will:

- Demonstrate an understanding of history and nature of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate the ability to use the inquiry process to solve problems.

Content of Science:

SC.PD.8.2
Mastery
Eighth grade students at the mastery level describe the importance of cell type in human systems; analyze how genetics, behavior and environment interact; construct simple dichotomous keys; trace the flow of energy in food webs; relate atomic structure and properties to location on the periodic table; write word equations and classify type; evaluate variations in diffusion rates and examine the effect of changing temperature; examine sources of energy; calculate and/or graph properties of waves, motion, work, power, and pressure; relate conservation of energy to transformations; recognize Doppler shift to sound; explain Newton's Laws of Motion; relate plate tectonics to geologic events; describe forces which shape the Earth's surface; describe motion and the origin of solar system objects; explain the relationships among weather, climate and oceans.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology, earth/environmental science, and astronomy.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



Application of Science:

SC.PD.8.3
Mastery
Eighth grade students at the mastery level test and record data to explore systems, models, and changes; identify a technological innovation and the science that makes it possible; identify positive outcomes and unintended consequences of a scientific discovery; identify the impact of a public policy decision regarding health, population resources or environmental issues.

Students will:

- Demonstrate the ability to use inquiry process to explore systems, models, and changes.
- Demonstrate an understanding of the interdependence between science and technology.
- Demonstrate an understanding of the utilization of technology to gather data and communicate designs, results and conclusions.
- Demonstrate an understanding of personal and societal benefits of science, and an understanding of public policy decisions as related to health, population, resource and environmental issues.

Operations and Algebraic Thinking:

Performance Descriptors
Mastery
Fourth grade students at the mastery level in mathematics:
distinguish between multiplicative and additive reasoning, apply the four operations with whole numbers to solve multi-step word problems, represent problems with equations containing unknowns, and evaluate the reasonableness of the results;
find and make connections between factors/ multiples and prime/composite numbers;
generate and/or discern a pattern or structure when given a rule.

Number and Operations - Fractions:

Performance Descriptors
Mastery
Fourth grade students at the mastery level in mathematics:
extend understanding of fraction equivalence and ordering;
extend understanding of addition, subtraction, and multiplication in whole numbers to fractions;
understand and compare decimal notation for fractions.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Geometry:

Performance Descriptors
Mastery
Fourth grade students at the mastery level in mathematics:
represent problems on a coordinate plane and find solutions;
use precise language to describe, classify and identify relationships among two-dimensional figures based on attributes.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Measurement and Data:

Performance Descriptors
Mastery
Fourth grade students at the mastery level in mathematics:
solve real-world problems involving measurements, conversions, formulas, and use of tools;
record, display in a line plot with fractional coefficients, and interpret given data to solve word problems;
understand concepts of angle, measure angles and recognize angle measures as additive.

Number and Operations in Base 10:

Performance Descriptors
Mastery
Fourth grade students at the mastery level in mathematics:
demonstrate understanding of place value and rounding of whole numbers;
illustrate and explain place value and apply properties of operations to perform multi-digit arithmetic.

PERFORMANCE DESCRIPTORS FOR MASTERY

8TH GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors
Mastery
Eighth grade students at mastery level in reading:
objectively summarize and cite textual evidence and make connections and inferences; analyze theme development and how sequence and complex characters are developed in literary and informational texts;
analyze how word choice, structure and point of view contribute to text development, tone, style, suspense and humor; compare and contrast among literary and informational texts;
analyze the extent to which a filmed or live production stays faithful to the text or script; evaluate the use of different mediums in presenting a topic; assess soundness of reasoning and relevance of evidence; identify conflicting information in two or more informational texts and draw from the themes, patterns of events or character types from early literary works to render modern works of fiction;
read and comprehend literary and informational texts in the grades 6-8 text complexity band independently and proficiently.

Writing:

Performance Descriptors
Mastery
Eighth grade students at mastery level in writing:
compose arguments and informative/explanatory texts to create cohesion and clarify relationships among claims and counterclaims; organize information into broader categories using well-chosen facts, quotations and varied transitions; write well-structured narratives that capture action, use sensory language, reflection, provide a concluding statement and show relationships among experiences and events;
use technology to produce, publish, distribute and strengthen writings that address purpose and audience; present relationships efficiently;
use search terms effectively to conduct short research projects answering self-generated questions; explore multiple avenues, including informational and literary texts to support a research topic, analysis and reflection; assess the credibility and accuracy of sources; avoid plagiarism; and use standard citation;
write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences

Speaking and Listening:

Performance Descriptors
Mastery
Eighth grade students at mastery level in speaking and listening:
engage effectively in collaborative collegial discussions and decision-making; use information presented in diverse formats to engage in topics, texts and issues; analyze purpose, evaluate motives behind a presentation, identify irrelevant information, reflect, pose questions that connect ideas and when warranted qualify or justify their own views in light of the evidence presented;
present claims that emphasize salient points in a focused, coherent manner with relevant evidence, sound valid reasoning and well-chosen details strengthened by integrating multimedia and visual displays that clarify information and add interest.

Language:

Performance Descriptors
Mastery
Eighth grade students at mastery level in language:
use advanced verb forms and verbals; correct inappropriate shifts in voice and mood; use punctuation that indicates pause and omission; and use parallel structure;
use knowledge of language to understand word choices, including how verb voice and verb mood affect context, emphasis, expression and formal style;
interpret figures of speech such as verbal irony and puns in context.

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4TH GRADE SOCIAL STUDIES

Geography:

Performance Descriptors
Mastery
Fourth grade students at mastery level in geography:
use reference sources and technology to create examples of maps depicting major physical features of the United States;
explain how geographic factors influenced transportation routes, population and interactions;
plan and construct maps to show the effect of geographic factors on historical events; and
compare and contrast how geographic conditions and human interventions have affected the environment, the economy and politics.

Civics:

Performance Descriptors
Mastery
Fourth grade students at mastery level in civics:
explain democratic beliefs as expressed in the founding documents and give examples of good citizenship;
explain the three branches of government and identify the rights of citizens;
justify the rule of law in a democracy and prove how it protects individual rights; and
participate in a school or community service project.

Economics:

Performance Descriptors
Mastery
Fourth grade students at mastery level in economics:
explain and give examples of key economic concepts and analyze factors that impact consumer choices;
relate the need of taxation to fund public services;
compile lists to show what jobs are needed because of supply and demand; and
prioritize the economic factors, including slavery and indentured servitude, that shaped the American colonies before the Revolutionary War.

West Virginia History:

Performance Descriptors
Mastery
Fourth grade students at mastery level in West Virginia Studies:
analyze the effects of geography on various facets of life in West Virginia;
compare and contrast West Virginia facts (e.g., population, products, resources, transportation); and
develop an article promoting West Virginia for inclusion in a brochure or magazine generated by students.

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History:

Performance Descriptors
Mastery
Fourth grade students at mastery level in history:
organize and explain various influencing factors upon the founding of the original colonies;
chart contributions of Native Americans, Africans, women and early historical figures involved before, during and after the Revolutionary War;
create a timeline to show events, contributions of historical figures and challenges leading to the beginnings of America as a nation and the establishment of the new government; and
describe the cause and effect relationship between the economic, political and cultural factors, people, events and transportation innovations on Westward Expansion.

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PERFORMANCE DESCRIPTORS FOR MASTERY

5TH GRADE ENGLISH LANGUAGE ARTS

Speaking and Listening:

Mastery
Fifth grade students at mastery level in speaking and listening:
come prepared to a collaborative discussion and draw from information read or studied; summarize a written text and points a speaker makes and explain how each claim is supported; make comments, elaborate on the remarks of others and draw conclusions based on new information;
report on a topic or present an opinion using a logical sequence of events; adapt speech to a variety of contexts and tasks; support the main idea with appropriate facts and sufficient details; speak clearly and enhance presentation with multimedia and visual displays.

Language:

Mastery
Fifth grade students at mastery level in language:
expand, combine and reduce sentences for meaning, interest and style while comparing and contrasting language used in stories, dramas or poems and differentiate between formal and informal situations;
interpret figurative language and use the relationship between particular words to better understand each; acquire and use general academic and domain-specific words and phrases that signal contrast, addition and other logical relationships.

Reading:

Mastery
Fifth grade students at mastery level in reading:
determine theme, compare and contrast two or more characters, settings or events drawing on details in a literary text; determine two or more main ideas and explain the relationships/interactions between individuals, events, ideas or concepts based on specific information in informational text and quote accurately from literary and informational text;
determine the meaning of figurative language; compare and contrast overall structure of two or more literary and informational texts; analyze multiple accounts of the same event or topic and note similarities and differences in point of view; explain how chapters, scenes or stanzas fit together;
draw on information from multiple print and digital sources; demonstrate the ability to locate answers quickly and efficiently; identify reasons and evidence that support points made by an author; analyze how visual and multimedia elements contribute to meaning, tone or beauty of a text; compare and contrast stories in the same genre;
read and comprehend literary and informational text in the grades 4-5 text complexity band independently and proficiently;
apply grade level phonics analysis skills to decode words;
read on level prose and poetry accurately and fluently to support comprehension.

Writing:

Mastery
Fifth grade students at mastery level in writing:
develop opinion and informative/explanatory texts organized to a specific topic in a clear, logical order; transition from the topic to supporting details using appropriate language and domain-specific vocabulary; provide a concluding statement related to the information; write narratives that orient the reader by establishing a situation; use concrete words and phrases using narrative techniques such as pacing and dialogue to show characters' response to situations;
with guidance and collaboration, organize and produce clear, coherent writings appropriate for task and audience; strengthen writing by editing, revising, rewriting; use technology, including the internet, to produce and publish;
use several sources to conduct short research projects, summarize and paraphrase gathered information in notes, use evidence to support analysis and research and provide a list of sources in the finished work;
write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences.



Regional Education Service Agencies
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7TH GRADE SOCIAL STUDIES

Civics:

Mastery
Seventh grade students at mastery level in civics:
classify the various forms of government through the Age of Imperialism;
examine examples of patriotism and nationalism in relation to various forms of governments through the Age of Imperialism; and
distinguish between rights and responsibilities of the members of social class systems in various civilizations.



Regional Education Service Agencies
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Literacy:

Mastery
Seventh grade students at mastery level in geography:
locate and draw conclusions about information on a variety of maps;
describe the geographic regions and cultures of the world and the physical and human processes that shape their environments; and
analyze how the relationship of people with their environment is affected by physical geography and the changing nature of the earth's surface in terms of settlement, transportation.

History:

Mastery
Seventh grade students at mastery level in economics:
give examples of the impact of economic concepts on individual citizens;
compare and contrast goods and services; describe the incentives of various countries to explore and settle new lands;
summarize how traditional economies led to the development of mercantilism and the middle class;
explain how natural and human events affect the local economy; and
explain the impact of natural resources on the economy of a nation.

Economics:

Mastery
Seventh grade students at mastery level in history:
explain major principles and key philosophies of the major world religions;
categorize the contributions of selected civilizations and describe how those contributions influenced other cultures;
explain how significant people, places, documents, ideas and events affected European civilization in the Middle Ages, Renaissance, and Reformation; and
examine the connection between imperialism and the triangular trade.



PERFORMANCE DESCRIPTORS FOR MASTERY

7TH GRADE SCIENCE

Nature of Science:

SC.PD.7.1

Mastery

Seventh grade students at the mastery level identify the importance of the research of historical and diverse scientists in society and culture; use skepticism, careful methodology, logical reasoning and creativity to conduct investigations; predict, hypothesize, identify variables, organize and interpret experimental data using safe techniques.

Students will:

- Demonstrate an understanding of the history of science and the evolution of scientific knowledge.
- Demonstrate an understanding of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate an understanding of the characteristics of a scientist.
- Demonstrate skills of scientific inquiry.

Application of Science:

SC.PD.7.3

Mastery

Seventh grade students at the mastery level analyze parts as they contribute to the functioning of the system; analyze changes in systems and models; match an innovation with the science that makes it possible; identify and use the appropriate technology to collect scientific data; use multiple media sources to evaluate different points of view regarding health, population, resources and environmental practices.

Students will:

- Explore the relationship between the parts and the whole system; construct a variety of useful models; examine changes that occur in an object or system.
- Demonstrate an understanding of the interdependence between science and technology.
- Demonstrate the ability to utilize technology to gather data and communicate designs, results and conclusions.
- Demonstrate the ability to evaluate the impact of different points of view on health, population, resource and environmental practices.

Content of Science:

SC.PD.7.2

Mastery

Seventh grade students at the mastery level describe the function of human systems, organs and cells; create simple keys to group organisms; analyze chemical and living cycles in ecosystems; illustrate life cycles of plants; describe particle movement and energy during phase changes; identify elements and compounds and place them in word equations; examine the behavior of light waves; interpret effect of medium on waves; characterize alternating and direct current; investigate energy transformation; explain mechanical advantage of simple machines; characterize gravity as a force; explain weather and patterns of ocean circulation; interpret and model topography; describe rock formation and classify rocks; explain life cycles of a star; relate latitude to climate.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology, earth/environmental science, and astronomy.
- Apply knowledge, understanding and skills of the science subject matter/concepts to daily life experiences.



5TH GRADE MATHEMATICS

Operations and Algebraic Thinking:

Performance Descriptors

Mastery

Fifth grade students at the mastery level in mathematics:

evaluate expressions, interpret the meaning of more complex expressions without evaluating them and translate verbal phrases into numerical expressions;

analyze rules and patterns, the numerical relationship between the terms of those patterns and represent the relationship of those terms on a coordinate graph.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Number and Operations in Base 10:

Performance Descriptors

Mastery

Fifth grade students at the mastery level in mathematics:

discern and explain the pattern of place values;

fluently perform operations with multi-digit whole numbers and decimals to hundredths.

Number and Operations - Fractions:

Performance Descriptors

Mastery

Fifth grade students at the mastery level in mathematics:

estimate and solve word problems involving addition and subtraction of fractions and mixed numbers, assess reasonableness of answers;

use visual models and equations while solving real-world problems demonstrating the understanding of multiplication and division of various fractional representations.

Geometry:

Performance Descriptors

Mastery

Fifth grade students at the mastery level in mathematics:

represent problems on a coordinate plane and find solutions;

use precise language to describe, classify and identify relationships among two-dimensional figures based on attributes.

Measurement and Data:

Performance Descriptors

Mastery

Fifth grade students at the mastery level in mathematics:

solve multi-step problems demonstrating the understanding of the relationships among units of measurement within a given measurement system;

solve real-world problems through the interpretation of data on a line plot;

demonstrate the understanding of volume concepts through measuring and the application of formulas to calculate an object's volume.



Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

5TH GRADE SCIENCE

Nature of Science:

SC.PD.5.1

Mastery

Fifth grade students at the mastery level recognize the research of historical and diverse scientists in society and culture; use careful methodology to observe, measure and record data as part of an investigation; demonstrate safe investigative techniques.

Students will:

- Demonstrate an understanding of the history of science and the involvement of scientific knowledge.
- Demonstrate an understanding of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate an understanding of the characteristics of a scientist.
- Demonstrate skills of scientific inquiry.

Content of Science:

SC.PD.5.2

Mastery

Fifth grade students at the mastery level identify and explain the function of living organisms, cells, and common energy conversions in cycles of matter; explore differences in niches and life cycles of organisms in an ecosystem that contribute to survival; find density experimentally; recognize that mass is conserved in physical changes; describe how the motion of objects are affected by variables; describe the structure of the earth and characterize the lithosphere and atmosphere; explore the earth's history using plate tectonics and relative dating; select the appropriate materials to design and test an electromagnet.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



Students will:

- Explore the relationship between the parts and the whole system; construct a variety of useful models; examine changes that occur in an object or system.
- Demonstrate an understanding of the interdependence between science and technology.
- Demonstrate the ability to utilize technology to gather data and communicate designs, results and conclusions.
- Demonstrate the ability to evaluate the impact of different points of view on health, population, resource and environmental practices.

Application of Science:

SC.PD.5.3

Mastery

Fifth grade students at the mastery level compare the functioning of parts to the functioning of a model; report on a technological innovation; use the appropriate technology to collect scientific data; use two media sources to evaluate points of view regarding health, population, resources or environmental practices.

Expressions and Equations:

Performance Descriptors

Mastery

Seventh grade students at the mastery level in mathematics:

use properties of operations to make sense of and modify linear expressions in the context of a problem; generate equations and inequalities using variables to find and display solutions to multi-step problems involving rational numbers.

Statistics & Probability:

Performance Descriptors

Mastery

Seventh grade students at the mastery level in mathematics:

obtain samples from a population, draw inferences and explore validity of conclusions based on the sampling; using samples from two populations with similar variables, draw comparative inferences; find probability through experimentation, develop a model to find theoretical probability and determine probability for compound events.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

7TH GRADE MATHEMATICS

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Geometry:

Performance Descriptors

Mastery

Seventh grade students at the mastery level in mathematics:

draw and construct geometric figures, describe geometric shapes created by intersecting three-dimensional figures and use scale drawings to solve problems; use area, volumetric, and geometric formulas and geometric relationships to solve multi-step real-world problems.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

The Number System:

Performance Descriptors

Mastery

Seventh grade students at the mastery level in mathematics:

recognize, explain and apply proportionality to solve multi-step ratio and percent problems.

Ratios & Proportional Relationships:

Performance Descriptors

Mastery

Seventh grade students at the mastery level in mathematics:

draw and construct geometric figures, describe geometric shapes created by intersecting three-dimensional figures and use scale drawings to solve problems; use area, volumetric, and geometric formulas and geometric relationships to solve multi-step real-world problems.

Geometry:

Performance Descriptors

Mastery

Seventh grade students at the mastery level in mathematics:

draw and construct geometric figures, describe geometric shapes created by intersecting three-dimensional figures and use scale drawings to solve problems; use area, volumetric, and geometric formulas and geometric relationships to solve multi-step real-world problems.

Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
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Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

PERFORMANCE DESCRIPTORS FOR MASTERY

7TH GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors
Mastery
Seventh grade students at mastery level in reading:
objectively summarize and cite pieces of literary and informational texts to support analysis of central ideas and interaction of elements of literary and informational texts;
analyze how rhyme, sound, form, structure and point of view contribute to meaning and how the author distinguishes his or her position from that of others in literary and informational text;
compare and contrast the portrayal of the subject in literary and informational texts by two or more authors and to their multimedia version, including techniques unique to each medium; assess relevance of key information; compare and contrast a fictional portrayal and a historical account of the same time period to understand how authors of fiction use or alter history;
read and comprehend literary and informational texts in the grades 6-8 text complexity band proficiently with scaffolding at the high end of the range.

Writing:

Performance Descriptors
Mastery
Seventh grade students at mastery level in writing:
compose logical arguments and informative/explanatory texts using accurate sources to create cohesion and to support claims with clear reasons and relevant evidence while acknowledging alternate or opposing claims; write narratives using effective technique, relevant descriptive details and well-structured sequences to establish point of view and to capture action;
use technology to produce, publish and distribute writing focused on how well purpose and audience have been addressed while linking and citing sources;
use search terms effectively to conduct short research projects that generate additional related, focused questions for further research while assessing the credibility and accuracy of sources, avoiding plagiarism and using a standard form for citation; draw evidence from literary or informational text to support analysis, reflection and research;
write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences.

Speaking and Listening:

Performance Descriptors
Mastery
Seventh grade students at mastery level in speaking and listening:
engage in collaborative discussions; track progress toward goals and deadlines; pose questions that elicit elaboration; acknowledge new information; analyze how main ideas and details clarify a topic; evaluate reasoning, relevance and sufficiency of evidence; respond to others with relevant observations and ideas; and modify their own views when warranted;
present claims and findings in a focused, coherent manner with pertinent descriptions, facts, details and examples using multimedia components and visual displays to emphasize salient points.

Language:

Performance Descriptors
Mastery
Seventh grade students at mastery level in language:
use commas to separate coordinating adjectives; explain the function of phrases and clauses and place them in a sentence recognizing and correcting misplaced and dangling modifiers;
choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy;
interpret figures of speech such as allusions in context; use relationship between particular words such as synonyms/antonyms and analogies to better understand each of the words.

Regional Education
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5TH GRADE SOCIAL STUDIES

Geography:

Performance Descriptors
Mastery
Fifth grade students at mastery level in geography:
measure distances in latitude and longitude, use a map scale and direction to describe location;
locate, identify and compare the regions, major rivers, landforms, natural resources and deserts of the United States and correctly locate the fifty states;
summarize the significance and contributions of immigrants in the United States during the early 20th century;
explain how the natural terrain influenced westward travel and settlement; and
identify and interpret the information and purpose of maps, globes, models, charts, graphs and various geographic tools.

Civics:

Performance Descriptors
Mastery
Fifth grade students at mastery level in civics:
research how and when the government provides for the needs and wants of the people;
role play a function of each level of government;
compare and contrast the rights, responsibilities, duties and privileges of a citizen;
summarize how the Thirteenth, Fourteenth and Fifteenth Amendments changed the lives of minorities; and
outline, interpret, and apply the process by which amendments are made, simulate a law being made and assume a role in a mock trial.

Economics:

Performance Descriptors
Mastery
Fifth grade students at mastery level in economics:
evaluate the roles of consumers and producers, and explain the concept of supply and demand;
critique the economic reasons for immigration and migration in the United States;
assess the resources of the geographic regions in the United States and the world;
evaluate the role of agriculture and the impact of industrialization on economic development of the United States;
compare the industrial North to the agricultural South prior to the Civil War; and
explain the social and economic effects of Reconstruction and Westward Expansion on different populations.

West Virginia History:

Performance Descriptors
Mastery
Fifth grade students at mastery level in West Virginia Studies:
reconstruct the economic, social and political history of West Virginia;
compare and contrast roles and functions of the government at the local, county and state levels and explain why fulfilling one's civic responsibility is important; and
sequence events and describe the tensions that led to the formation of West Virginia.

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History:

Performance Descriptors
Mastery
Fifth grade students at mastery level in history:
compare and contrast the industrial North to the agricultural South before, during and after the Civil War;
examine the economic, political and social developments during Reconstruction;
analyze how transportation affected various peoples living in the West;
compare and contrast the major domestic and foreign developments that contributed to the United States' becoming a world power; and
explain the people and factors that led to industrialization of the United States in the late 19th century.

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Speaking and Listening:

Performance Descriptors	Mastery
Sixth grade students at mastery level in speaking and listening:	
come prepared to a collaborative discussion and draw from information read or studied to engage in discussions of information presented in diverse formats, posing and responding to questions, referring to evidence, distinguishing valid claims, using reflection and paraphrasing to understand multiple perspectives;	speaking in task appropriate language, clearly present logically sequenced, relevant contributions using visual and multimedia components to clarify.

Language:

Performance Descriptors	Mastery
Sixth grade students at mastery level in language:	
use intensive pronouns and proper case, correct non-standard pronoun usage, recognize vague pronouns and improve expression; and use commas, parentheses and dashes to set off nonrestrictive / parenthetical elements;	vary sentence patterns for meaning, interest and style while maintaining consistency in tone and style;
	use context clues, affixes and/or roots to decipher meaning, consulting print and digital references, demonstrating understanding of figures of speech, relationships between words, denotation and the nuances of connotation.

Writing:

Performance Descriptors	Mastery
Sixth grade students at mastery level in writing:	
develop argumentative, informative/ explanatory texts that support claims, examine and convey ideas and information and use coherent and relevant development; write narratives that possess a variety of appropriate transitions and details using precise language and domain-specific vocabulary to convey experiences;	utilizing the writing process and collaboration, produce, strengthen and publish in one sitting an audience-appropriate writing that is clear and organized and conveys appropriate style;
	conduct and refine research that encourages analysis, evaluation and reflection using multiple, credible sources to avoid plagiarism and use a basic bibliographic format;
	write over extended time frames for research-based projects and shorter time frames for specific tasks, purposes and audiences.

Reading:

Performance Descriptors	Mastery
Sixth grade students at mastery level in reading:	
support analysis of literary and informational text with specific evidence and objective inferences;	summarize, determine central ideas and describe plot development and characters' response;
	determine the figurative and connotative meanings and analyze how words and text structure contribute to tone and development of theme, setting, plot and point of view in literary and informational text;
	compare and contrast one author's presentation across genres and media formats in literary and informational text;
	read and comprehend literary and informational text in the grades 6-8 text complexity band proficiently with scaffolding as needed at the high end of the range.



Civics:

Performance Descriptors	Mastery
Sixth grade students at mastery level in civics:	
describe the process of how a bill becomes a law by following a state bill;	examine differences in forms of government and their influence on historic events;
	compare and contrast the key figures of the U.S. government, the structure of the U.S. Congress, and the Constitutional requirements of its members;
	describe acts of patriotism and civil discourse in U.S. history; and
	explain how global organizations provide aid and support.

Literacy:

Performance Descriptors	Mastery
Sixth grade students at mastery level in geography:	
explain how geographic features have influenced safety of the U.S. in conflicts;	explain how various conflicts caused the boundary changes on historical maps;
	locate specific places on a world time zone map and identify their current time; and
	locate major world waterways and examine their impact on transportation and trade

Economics:

Performance Descriptors	Mastery
Sixth grade students at mastery level in economics:	
compare and contrast the basic characteristics of communism, socialism, and capitalism in various countries;	explain how renewable and nonrenewable resources and the effect on the economy;
	list the members of NAFTA and its purpose; and
	analyze the impact of technology, production, marketing and consumption of goods and services in selected nations.

History:

Performance Descriptors	Mastery
Sixth grade students at mastery level in history:	
compare and contrast causes, key events and outcomes of World War I with those of World War II;	explain the social, economic and political responses to the Great Depression;
	examine the leaders of the Cold War and summarize events;
	identify key figures in the struggle for minority rights and cite their actions; and
	analyze the role of natural resources in the Middle eastern conflicts and identify key figures involved.

Sixth through eighth grade students at mastery level in literacy:

determine central ideas and cite textual evidence; provide an accurate summary; identify key steps in a process related to history/social studies; determine the meaning of domain-specific vocabulary; identify an author's point of view or purpose;

integrate visual information; distinguish among fact, opinion and reasoned judgment; analyze the relationship between primary and secondary sources;

read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently;

compose arguments and informative/explanatory texts; use precise language and domain-specific vocabulary;

with some guidance and support, use technology to develop, strengthen, publish and present clear and coherent writing;

conduct short research projects drawing on several relevant, credible, and accurate sources; avoid plagiarism; and

write over extended time frames for research-based projects and shorter time frames for a range of discipline-specific tasks, purposes and audiences.

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RESA 6 F.A.S.T. Goals

We Will:

- * Provide professional learning centered around the 7 Standards for High Quality Schools
- * Provide technical assistance to low-performing schools
- * Provide high quality, targeted educator learning designed to enhance the performance and progress of students



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RESA 6

A Powerful Engine for Education

Focus

Assistance

Support

Team

"Good teaching comes not from behind the desk
but from behind the heart."

~ Elizabeth Anderson ~



2015-2016

Building Blocks for the Future

Standard 1: Positive Climate and Cohesive Culture

- Function A: Shared Beliefs and Values
- Function B: High Expectations for All
- Function C: Safe, Orderly and Engaging Environment

Standard 7: Continuous Improvement

- Function A: Focused and Coherent Plan
- Function B: Processes and Structures
- Function C: Monitoring for Results



Standard 6: Efficient and Effective Management

- Function A: Facilities
- Function B: Fiscal Resources
- Function C: Personnel
- Function D: Data, Information Systems, Technology Tools and Infrastructure



Standard 2: School Leadership

- Function A: Principal Leadership
- Function B: School Teams and Councils
- Function C: Teacher Leadership
- Function D: Student Leadership

Standard 3: Standards-Focused Curriculum, Instruction and Assessments

- Function A: Classroom Learning Environment
- Function B: Standards-Focused Curriculum
- Function C: Instructional Planning
- Function D: Instructional Delivery

WV Standards for High Quality Schools

Standard 5: Educator Growth and Development

- Function A: Professional Development
- Function B: Teacher Collaboration
- Function C: Evaluation, Feedback and Support

Standard 4: Student Support Services and Family/Community Connections

- Function A: Positive Relationships
- Function B: Student Personal Development
- Function C: Parent and Community Partnerships

Link to WV High Quality Standards: <http://wvde.state.wv.us/schoolimprovement/high-quality-standards.html>

Nature of Science:

SC.PD.6.1

Mastery

Sixth grade students at the mastery level describe the research of historical and diverse scientists in society and culture; use careful methodology, logical reasoning and creativity to conduct an investigation; and identify variables, organize and interpret experimental data using safe techniques.

Students will:

- Demonstrate an understanding of the history of science and the evolution of scientific knowledge.
- Demonstrate an understanding of the contributions of diverse cultures and scientists.
- Demonstrate an understanding of the characteristics of a scientist.
- Demonstrate skills of scientific inquiry.

Content of Science:

SC.PD.6.2

Mastery

Sixth grade students at the mastery level illustrate cycles of ecosystems; classify organisms using traits; compare plant and animal cell models; classify properties of substances and mixtures; characterize electromagnetic and sound waves; describe the flow of heat between objects; diagram simple electric circuits; relate gravity and mass; examine how forces effect motion; examine simple machines; describe events associated with positions of the earth, moon, and sun; associate life forms with geologic eras; use technology to investigate weather; trace the history of plate tectonics theory.

Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



Students will:

- Explore the relationship between the parts and the whole system; construct a variety of useful models; examine changes that occur in an object or system.
- Demonstrate an understanding of the interdependence between science and technology.
- Demonstrate the ability to utilize technology to gather data and communicate designs, results and conclusions.
- Demonstrate the ability to evaluate the impact of different points of view on health, population, resource and environmental practices.

Application of Science:

SC.PD.6.3

Mastery

Sixth grade students at the mastery level compare the functioning of parts to the functioning of the system or model; match innovations with the science that makes them possible; use the appropriate technology to collect scientific data; use media sources to evaluate different points of view regarding health, population, resources or environmental practices.

Expressions and Equations:

Performance Descriptors

Mastery

Sixth grade students at the mastery level in mathematics:

- extend reasoning from numerical to algebraic expressions, identify and simplify equivalent expressions and communicate meaning using appropriate mathematical vocabulary;
- use algebraic equations and inequalities to solve real-world problems and understand domains and meanings of variables in different contexts;
- analyze relationships between dependent and independent variables, state the meaning of variables, write applicable equations, and analyze using graphs and tables.

Geometry:

Performance Descriptors

Mastery

Sixth grade students at the mastery level in mathematics:

- create representations of three-dimensional geometric figures while solving real-world and mathematical problems involving surface area and volume.

Text-dependent Questions:

- Can only be answered with evidence from the text.
- Can be literal (checking for understanding) but must also involve analysis, synthesis, evaluation.
- Focus on word, sentence, and paragraph, as well as larger ideas, themes, or events.
- Focus on difficult portions of text in order to enhance reading proficiency.
- Can also include prompts for writing and discussion questions.

Ratios & Proportional Relationships:

Performance Descriptors

Mastery

Sixth grade students at the mastery level in mathematics:

- state the meaning of ratio concepts, use ratio reasoning and rates to solve problems.

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.



Literacy Shifts in Mathematics:

1. Focus: Focus strongly where the Standards focus.
2. Coherence: Think across grades, and link to major topics within grades.
3. Rigor: In major topics pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Literacy Shifts in All Content Areas:

1. Regular practice with complex text and its academic language.
2. Reading, writing and speaking grounded in evidence from text, both literary and informational.
3. Building knowledge through content-rich nonfiction.

Statistics and Probability:

Performance Descriptors

Mastery

Sixth grade students at the mastery level in mathematics:

- recognize that statistical questions include variability in answers;
- create graphical representations of data and reason abstractly and quantitatively about statistical distributions.

The Number System:

Performance Descriptors

Mastery

Sixth grade students at the mastery level in mathematics:

- model and solve word problems requiring division of fractions by fractions and interpret the quotient in the context of the situation;
- perform all operations (including the distributive property) fluently with decimals and whole numbers; identify least common multiple and greatest common factor;
- make sense of quantities and relationships among rational numbers and absolute values and use graphs to solve real-world problems and discern patterns.