

PERFORMANCE DESCRIPTORS FOR MASTERY

4TH GRADE ENGLISH LANGUAGE ARTS

Reading:

Performance Descriptors
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:

Performance Descriptors
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 analysis, 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.

Speaking and Listening:

Performance Descriptors
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:

Performance Descriptors
Mastery
Fourth grade students at mastery level in language:
form and use relative pronouns and adverbs; form and order adjectives; use verbs, 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.

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4TH GRADE MATHEMATICS

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.

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
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.

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.

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.

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.



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.

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.



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.

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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