

NEW MEXICO ACADEMIC STANDARDS*

GRADE 5

ENGLISH LANGUAGE ARTS

READING: INFORMATIONAL TEXT

RI.5.1	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
RI.5.2	Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
RI.5.3	Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
RI.5.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
RI.5.5	Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
RI.5.6	Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
RI.5.7	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
RI.5.8	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).

READING: FOUNDATIONAL SKILLS

RF.5.3	Know and apply grade-level phonics and word analysis skills in decoding words.
RF.5.3.a.	Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
RF.5.4	Read with sufficient accuracy and fluency to support comprehension.
RF.5.4.a.	Read on-level text with purpose and understanding.
RF.5.4.c.	Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

LANGUAGE

L.5.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.
L.5.4.a.	Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
L.5.4.b.	Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).
L.5.4.c.	Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
L.5.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).

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ENGLISH LANGUAGE ARTS

WRITING

W.5.1	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
W.5.1.a.	Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer’s purpose.
W.5.1.b.	Provide logically ordered reasons that are supported by facts and details.
W.5.1.c.	Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).
W.5.1.d.	Provide a concluding statement or section related to the opinion presented.
W.5.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
W.5.2.a.	Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
W.5.2.b.	Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
W.5.2.c.	Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially).
W.5.2.d.	Use precise language and domain-specific vocabulary to inform about or explain the topic.
W.5.2.e.	Provide a concluding statement or section related to the information or explanation presented.
W.5.4	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
W.5.8	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
W.5.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.

SPEAKING AND LISTENING

SL.5.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.
SL.5.1.a.	Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
SL.5.1.b.	Follow agreed-upon rules for discussions and carry out assigned roles.
SL.5.1.c.	Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
SL.5.1.d.	Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
SL.5.4	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

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MATHEMATICS

OPERATIONS AND ALGEBRAIC THINKING

5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.

NUMBERS AND OPERATIONS IN BASE TEN

5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

5.NBT.A.3 Read, write, and compare decimals to thousandths.

5.NBT.B.5 Fluently multiply multi-digit whole numbers using the standard algorithm.

5.NBT.B.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

MEASUREMENT AND DATA

5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

5.MD.C.3.a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.

5.MD.C.3.b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

5.MD.C.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

5.MD.C.5.b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.

GEOMETRY

5.G.A.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

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SCIENCE

PHYSICAL SCIENCES

5-PS1-1.	Develop a model to describe that matter is made of particles too small to be seen.
5-PS1-2.	Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
5-PS1-4.	Conduct an investigation to determine whether the mixing of two or more substances results in new substances.
5-PS2-1.	Support an argument that the gravitational force exerted by Earth on objects is directed down.

LIFE SCIENCES

5-LS1-1.	Support an argument that plants get the materials they need for growth chiefly from air and water.
5-LS2-1.	Develop a model to describe the movement of matter and energy among producers, consumers, decomposers, and the environment.

EARTH AND SPACE SCIENCES

5-ESS2-2.	Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
5-ESS3-1.	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

ENGINEERING DESIGN

3-5-ETS1-1.	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
3-5-ETS1-2.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
3-5-ETS1-3.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

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