NEW MEXICO
Public Education Department

F.5 Science - Grade 5

PUBLISHER/PROVIDER MATERIAL INFORMATION (TO BE COMPLETED BY PUBLISHER/PROVIDER)			
Publisher/Provider Name/Imprint:		Grade(s):	
Title of Student Edition:		Student Edition ISBN:	
Title of Teacher Edition:		Teacher Edition ISBN:	
Title of SE Workbook:		SE Workbook ISBN:	

PUBLISHER/PROVIDER CITATION VIDEO: Reviewer must view video before starting the review of this set of materials.			
Citation Video Link:			
Citation video certification:	I certify that I have viewed the citation video for this specific publisher and set of materials.		
Digital Material Log In (if applicable):	Website:	Username:	Password:

SCORING (TO BE COMPLETED BY REVIEWER AND FACILITATOR)			
Reviewer Number:		Date:	

Section 1: Standards Review: Science

Abbreviations for the Form F Standards Review Tab:
- PE: Performance Expectation
- DCI: Disciplinary Core Idea
- SEP: Science and Engineering Practices
- CCC: Crosscutting Concepts
- CONN: Connections
- NM: NM STEM Ready Standard
- CCSS: Common Core State Standards for ELA/Literacy in Science and Common Core State Standards for Math in Science as identified in the NGSS

PUBLISHER/PROVIDER INSTRUCTIONS:
- Publisher/Provider citations for this section will refer to the **Teacher Edition (teacher-facing core material).** The cited Teacher Edition should correspond with the title and ISBN entered on the Form F cover page, whether in print, online, or both. The review set submitted to the summer review institute should also correspond with what is cited on the Form F. If the review set is an online platform only, then that is what should be cited on the Form F and submitted for review by the review teams. If the review set is in print only, then that is what should be cited on the Form F and submitted for review by the review teams.
- For this section, the publisher/provider will enter one citation per DCI, SEP, CCC, CONN, and NM standard in Column D. Each citation should direct the reviewer to a specific location in the materials that best meets the standard. The citations should be concise and should allow the reviewer to easily determine that all components of the standard have been met. Each citation should cover no more than 3 pages within the materials. ***Any cells grayed out do not require a citation.***
  - **Column D:** Enter one citation in Column D from the **Teacher Edition (teacher-facing core material)**. Each citation should direct the reviewer to a specific location in the materials that best meets the standard. The cited material for each DCI, SEP, CCC, and CONN must directly relate to the PE under which they fall.
- The material will be scored for alignment with each DCI, SEP, CCC, CONN, and NM standard within each PE as "Meets expectations", "Partially meets expectations", or "Does not meet expectations" based on the citations provided. A score for the PE will be derived from the related DCIs, SEPS, CCCs, CONNs, and NM Standards within the PE.
  - **NOTE: You may not use a citation more than once across ALL sections of the rubric.**

Abbreviations for the Form F Standards Review Tab:
- **PE:** Performance Expectation
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Reviewer directions for Science Standards Review:

Columns D-G: The publisher/provider will provide a citation from the **Teacher Edition (teacher-facing core material)** (print and/or digital) for each DCI, SEP, CCC, CONN, and NM standard in column D. Review the cited material and score the material by determining the degree to which it meets the standard:
- o M = Meets the standard
- o P = Partially meets the standard
- o D = Does not meet the standard

Start by scoring the DCI(s) for the PE. If all DCIs within the PE score a D (columns E *AND* I), score all other components within the PE with a D and move on to the next PE.

Evidence for the publisher citations is required *only* if you score the materialswith a D. For your evidence for each standard that scores a D, choose one of the options from the dropdown menu in Column G. If the reason for scoring the materials with a D is not one of the dropdown options, enter your own evidence statement in the cell in Column G.
- ***o Any cells grayed out do not require a citation or evidence. The score cells in those rows will automatically populate if formulated to do so.***
- ***o Each cell in the Score column (column E) will turn purple as you score the materials.***

Columns H-K: Using the **Student Edition, Student Workbook, or other student-facing materials**, provide a citation for each DCI, SEP, CCC, CONN, and NM standard in Column H from the student materials that best meets the standard and addresses all components of the standard. Review the cited material, score the material by determining the degree to which it meets the standard, and provide evidence to support your determination:
- o M = Meets the standard
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- ***o Any cells grayed out do not require a citation or evidence. The score cells in those rows will automatically populate if formulated to do so.***
- ***o Each cell in the Reviewer Citation column, Score column, and Reviewer Evidence column (columns H, I, and K) will turn purple as you score the materials.***

Criteria #	Standard Identifier	Grade 5 Science Standards Review:	Publisher/Provider Citation from Teacher Edition	Score	If Scored D: Reviewer's Evidence for Publisher Citation	Reviewer Citation from Student Edition/Workbook	Score	Required: Reviewer's Evidence	Comments, other citations, notes
Matter and Its Interactions									
1	PE	**5-PS1-1. Students who demonstrate understanding can: Develop a model to describe that matter is made of particles too small to be seen.**							
2	DCI	**PS1.A: Structure and Properties of Matter** • Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gases are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects.							
3	SEP	**Developing and Using Models** *Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.* • Use models to describe phenomena.							
4	CCC	**Scale, Proportion, and Quantity** • Natural objects exist from the very small to the immensely large.							
5	PE	**5-PS1-2. Students who demonstrate understanding can: 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.**							
6	DCI	**PS1.A: Structure and Properties of Matter** • The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish.							
7	DCI	**PS1.B: Chemical Reactions** • No matter what reaction or change in properties occurs, the total weight of the substances does not change. (Boundary: Mass and weight are not distinguished at this grade level.)							
8	SEP	**Using Mathematics and Computational Thinking** *Mathematical and computational thinking in 3–5 builds on K–2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions.* • Measure and graph quantities such as weight to address scientific and engineering questions and problems.							
9	CCC	**Scale, Proportion, and Quantity** • Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.							
10	CONN	**Scientific Knowledge Assumes an Order and Consistency in Natural Systems** • Science assumes consistent patterns in natural systems.							
11	PE	**5-PS1-3. Students who demonstrate understanding can: Make observations and measurements to identify materials based on their properties.**							
12	DCI	**PS1.A: Structure and Properties of Matter** • Measurements of a variety of properties can be used to identify materials. (Boundary: At this grade level, mass and weight are not distinguished, and no attempt is made to define the unseen particles or explain the atomic-scale mechanism of evaporation and condensation.)							
13	SEP	**Planning and Carrying Out Investigations** *Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.* • Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon.							
14	CCC	**Scale, Proportion, and Quantity** • Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.							
15	PE	**5-PS1-4. Students who demonstrate understanding can: Conduct an investigation to determine whether the mixing of two or more substances results in new substances.**							
16	DCI	**PS1.B: Chemical Reactions** • When two or more different substances are mixed, a new substance with different properties may be formed.							
17	SEP	**Planning and Carrying Out Investigations** *Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.* • Conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.							

18	CCC	**Cause and Effect** • Cause and effect relationships are routinely identified and used to explain change.							
Motion and Stability: Forces and Interactions									
19	PE	**5-PS2-1. Students who demonstrate understanding can: Support an argument that the gravitational force exerted by Earth on objects is directed down.**							
20	DCI	**PS2.B: Types of Interactions** • The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.							
21	SEP	**Engaging in Argument from Evidence** *Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).* • Support an argument with evidence, data, or a model.							
22	CCC	**Cause and Effect** • Cause and effect relationships are routinely identified and used to explain change.							
Energy									
23	PE	**5-PS3-1. Students who demonstrate understanding can: Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.**							
24	DCI	**PS3.D: Energy in Chemical Processes and Everyday Life** • The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).							
25	DCI	**LS1.C: Organization for Matter and Energy Flow in Organisms** • Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion.							
26	SEP	**Developing and Using Models** *Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.* • Use models to describe phenomena.							
27	CCC	**Energy and Matter** • Energy can be transferred in various ways and between objects.							
From Molecules to Organisms: Structures and Processes									
28	PE	**5-LS1-1. Students who demonstrate understanding can: Support an argument that plants get the materials they need for growth chiefly from air and water.**							
29	DCI	**LS1.C: Organization for Matter and Energy Flow in Organisms** • Plants acquire their material for growth chiefly from air and water.							
30	SEP	**Engaging in Argument from Evidence** *Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).* • Support an argument with evidence, data, or a model.							
31	CCC	**Energy and Matter** • Matter is transported into, out of, and within systems.							
Ecosystems: Interactions, Energy, and Dynamics									
32	PE	**5-LS2-1. Students who demonstrate understanding can: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.**							
33	DCI	**LS2.A: Interdependent Relationships in Ecosystems** • The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.							
34	DCI	**LS2.B: Cycles of Matter and Energy Transfer in Ecosystems** • Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment.							
35	SEP	**Developing and Using Models** *Modeling in 3–5 builds on K–2 models and progresses to building and revising simple models and using models to represent events and design solutions.* • Develop a model to describe phenomena.							
36	CONN	**Science Models, Laws, Mechanisms, and Theories Explain Natural Phenomena** • Science explanations describe the mechanisms for natural events.							
37	CCC	**Systems and System Models** • A system can be described in terms of its components and their interactions.							
Earth's Place in the Universe									
38	PE	**5-ESS1-1. Students who demonstrate understanding can: Support an argument that the apparent brightness of the sun and stars is due to their relative distances from the Earth.**							
39	DCI	**ESS1.A: The Universe and its Stars** • The sun is a star that appears larger and brighter than other stars because it is closer. Stars range greatly in their distance from Earth.							
40	SEP	**Engaging in Argument from Evidence** *Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).* • Support an argument with evidence, data, or a model.							
41	CCC	**Scale, Proportion, and Quantity** • Natural objects exist from the very small to the immensely large.							
42	PE	**5-ESS1-2. Students who demonstrate understanding can: Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.**							

43	DCI	**ESS1.B: Earth and the Solar System** • The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily changes in the length and direction of shadows; and different positions of the sun, moon, and stars at different times of the day, month, and year.							
44	SEP	**Analyzing and Interpreting Data** *Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.* • Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships.							
45	CCC	**Patterns** • Similarities and differences in patterns can be used to sort, classify, communicate and analyze simple rates of change for natural phenomena.							
Earth's Systems									
46	PE	**5-ESS2-1. Students who demonstrate understanding can: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.**							
47	DCI	**ESS2.A: Earth Materials and Systems** • Earth's major systems are the geosphere (solid and molten rock, soil, and sediments), the hydrosphere (water and ice), the atmosphere (air), and the biosphere (living things, including humans). These systems interact in multiple ways to affect Earth's surface materials and processes. The ocean supports a variety of ecosystems and organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather.							
48	SEP	**Developing and Using Models** *Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.* • Develop a model using an example to describe a scientific principle.							
49	CCC	**Systems and System Models** • A system can be described in terms of its components and their interactions.							
50	PE	**5-ESS2-2. Students who demonstrate understanding can: Describe and graph the amounts of saltwater and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.**							
51	DCI	**ESS2.C: The Roles of Water in Earth's Surface Processes** • Nearly all of Earth's available water is in the ocean. Most freshwater is in glaciers or underground; only a tiny fraction is in streams, lakes, wetlands, and the atmosphere.							
52	SEP	**Using Mathematics and Computational Thinking** *Mathematical and computational thinking in 3–5 builds on K–2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions.* • Describe and graph quantities such as area and volume to address scientific questions.							
53	CCC	**Scale, Proportion, and Quantity** • Standard units are used to measure and describe physical quantities such as weight and volume.							
Earth and Human Activity									
54	PE	**5-ESS3-1. Students who demonstrate understanding can: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.**							
55	DCI	**ESS3.C: Human Impacts on Earth Systems** • Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments.							
56	SEP	**Obtaining, Evaluating, and Communicating Information** *Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.* • Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.							
57	CCC	**Systems and System Models** • A system can be described in terms of its components and their interactions.							
58	CONN	**Science Addresses Questions About the Natural and Material World.** • Science findings are limited to questions that can be answered with empirical evidence.							
New Mexico Science and Society:									
59	NM	**5-SS-1 NM:** Communicate information gathered from books, reliable media, or outside sources, that describes how a variety of scientists and engineers across New Mexico have improved existing technologies, developed new ones, or improved society through applications of science.							
Engineering Design									
60	PE	**3-5-ETS1-1. Students who demonstrate understanding can: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.**							
61	DCI	**ETS1.A: Defining and Delimiting Engineering Problems** • Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. (3-5-ETS1-1)							
62	SEP	**Asking Questions and Defining Problems** *Asking questions and defining problems in 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships.* • Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost. (3-5-ETS1-1)							
63	CCC	**Influence of Science, Engineering, and Technology on Society and the Natural World** • People's needs and wants change over time, as do their demands for new and improved technologies. (3-5-ETS1-1)							

64	PE	**3-5-ETS1-2. Students who demonstrate understanding can: 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.**							
65	DCI	**ETS1.B: Developing Possible Solutions** • Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. (3-5-ETS1-2)							
66	DCI	**ETS1.B: Developing Possible Solutions** • At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and share ideas can lead to improved designs. (3-5-ETS1-2)							
67	SEP	**Constructing Explanations and Designing Solutions** *Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.* • Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem. (3-5-ETS1-2)							
68	CCC	**Influence of Science, Engineering, and Technology on Society and the Natural World** • Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands. (3-5-ETS1-2)							
69	PE	**3-5-ETS1-3. Students who demonstrate understanding can: 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.**							
70	DCI	**ETS1.B: Developing Possible Solutions** • Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3)							
71	DCI	**ETS1.C: Optimizing the Design Solution** • Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3)							
72	SEP	**Planning and Carrying Out Investigations** *Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.* • Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (3-5-ETS1-3)							

CCSS for ELA/Literacy and Math in Grade 5 NGSS **• NOTE: The standards noted at the end of each CCSS (such as *(HS-ESS1-1), (HS-ESS1-2), (HS-ESS1-5)*) are the occurrences of the CCSS within the NGSS.**									
Grade 5 CCSS ELA/Literacy									
73	CCSS ELA/ Literacy	**RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. *(5-PS2-1), (5-LS1-1), (5-ESS3-1), (5-ESS1-1), (3-5-ETS1-2)*							
74	CCSS ELA/ Literacy	**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. *(5-PS1-1), (5-PS3-1), (5-LS2-1), (5-ESS1-1), (5-ESS2-1), (5-ESS2-2), (5-ESS3-1), (3-5-ETS1-2)*							
75	CCSS ELA/ Literacy	**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). *(5-ESS1-1)*							
76	CCSS ELA/ Literacy	**RI.5.9** Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. *(5-PS2-1), (5-LS1-1), (5-ESS1-1), (5-ESS3-1), (3-5-ETS1-2)*							
77	CCSS ELA/ Literacy	**W.5.1** Write opinion pieces on topics or texts, supporting a point of view with reasons and information. *(5-PS2-1), (5-LS1-1), (5-ESS1-1)*							
78	CCSS ELA/ Literacy	**W.5.7** Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. *(5-PS1-2), (5-PS1-3), (5-PS1-4), (3-5-ETS1-1), (3-5-ETS1-3)*							
79	CCSS ELA/ Literacy	**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. *(5-PS1-2), (5-PS1-3), (5-PS1-4), (5-ESS2-2), (5-ESS3-1), (3-5-ETS1-1), (3-5-ETS1-3)*							
80	CCSS ELA/ Literacy	**W.5.9** Draw evidence from literary or informational texts to support analysis, reflection, and research. *(5-PS1-2), (5-PS1-3), (5-PS1-4), (5-ESS3-1)*							
81	CCSS ELA/ Literacy	**SL.5.5** Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. *(5-PS3-1),(5-LS2-1), (5-ESS1-2), (5-ESS2-1), (5-ESS2-2)*							
Grade 5 CCSS Math									
82	CCSS Math	**MP.2** Reason abstractly and quantitatively. *(5-PS1-1), (5-PS1-2), (5-PS1-3), (5-LS1-1), (5-LS2-1), (5-ESS1-1), (5-ESS1-2), (5-ESS2-1), (5-ESS2-2), (5-ESS3-1), (3-5-ETS1-1), (3-5-ETS1-2), (3-5-ETS1-3)*							
83	CCSS Math	**MP.4** Model with mathematics. *(5-PS1-1), (5-PS1-2), (5-PS1-3), (5-ESS1-1), (5-ESS1-2), (5-ESS2-1), (5-ESS2-2), (5-ESS3-1), (3-5-ETS1-1), (3-5-ETS1-2), (3-5-ETS1-3)*							
84	CCSS Math	**MP.5** Use appropriate tools strategically. *(5-PS1-2), (5-LS1-1), (5-LS2-1), (5-PS1-3), (3-5-ETS1-1), (3-5-ETS1-2), (3-5-ETS1-3)*							
85	CCSS Math	**3-5.OA** Operations and Algebraic Thinking *(3-5-ETS1-1), (3-5-ETS1-2)*							
86	CCSS Math	**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-PS1-1)*							
87	CCSS Math	**5.NBT.A.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. *(5-ESS1-1)*							

88	**CCSS Math**	**5.NF.B.7** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. *(5-PS1-1)*							
89	**CCSS Math**	**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-PS1-2), (5-LS1-1)*							
90	**CCSS Math**	**5.MD.C.3** Recognize volume as an attribute of solid figures and understand concepts of volume measurement. *(5-PS1-1)*							
91	**CCSS Math**	**5.MD.C.4** Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. *(5-PS1-1)*							
92	**CCSS Math**	**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. *(5-ESS2-1), (5-ESS1-2)*							

Section 2: Science Content Review

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  - **NOTE: You may not use a citation more than once across ALL sections of the rubric.**

	Reviewer directions for Science Content Review:	**Columns C-F:** The publisher/provider will provide a citation from the **Teacher Edition (teacher-facing core material) OR Student Edition/Student Workbook (student-facing core material) (print and/or digital)** for each criterion. Review the cited material and score the material by determining the degree to which it meets the criterion: o M = Meets the criterion o P = Partially meets the criterion o D = Does not meet the criterion Evidence for the publisher citations is required *only* if you score the materials with a D. For your evidence for each criterion that scores a D, choose one of the options from the dropdown menu in Column F. If the reason for scoring the materials with a D is not one of the dropdown options, enter your own evidence statement in the cell in Column F. ***o Each cell in the Score column (column D) will turn purple as you score the materials.***				**Columns G-J:** Using either the **Teacher Edition (teacher-facing core material) OR Student Edition/Student Workbook (student-facing core material)** (print and/or digital), provide a citation for each criterion that best meets the criterion and addresses all components of the criterion. Review the cited material, score the material by determining the degree to which it meets the criterion, and **provide evidence from the material to support your determination:** o M = Meets the criterion o P = Partially meets the criterion o D = Does not meet the criterion ***o Each cell in the Reviewer Citation column, Score column, and Reviewer Evidence column (columns G, H, and J) will turn purple as you score the materials.***			
Criteria #	**Grade K-12 Science Content Criteria**	Publisher/Provider Citation	Score	If Scored D: Reviewer's Evidence for Publisher Citation	Reviewer Citation	Score	Required: Reviewer's Evidence	Comments, other citations, notes
FOCUS AREA 1: PHENOMENA-/PROBLEM-BASED AND THREE-DIMENSIONAL APPROACH Instructional materials are centered around high quality phenomena and/or problems and require a three dimensional approach to make sense of the phenomena or to solve the problems.								
1	Materials clearly integrate and describe the three-dimensional NM STEM Ready! Standards via appropriate grade-band, interdisciplinary progressions that center around the phenomena, utilizing aligned SEPs, CCCs, DCIs and the common core math and ELA standards' connections.							
2	Materials consistently support meaningful student sensemaking with the three dimensions, including discourse, that is appropriate to grade band progressions, instruction and assessment.							
3	Natural and designed phenomena and/or problems that are meaningful and apparent to students drive coherent lessons and activities in all three dimensions.							
FOCUS AREA 2: THREE-DIMENSIONAL ASSESSMENT Assessments provide tools, guidance and support for teachers to collect, interpret and act on data about student progress toward the learning goals of the 3 dimensional standards.								
4	Materials engage students in meaningful tasks as well as multiple assessment types and opportunities, across all dimensions, in order to make sense of phenomena and/or design solutions to problems.							
5	Materials include opportunities for students to obtain feedback from teachers and peers as well as opportunities for student self-reflection.							
FOCUS AREA 3: TEACHER SUPPORTS Materials include opportunities for teachers to effectively plan and utilize materials.								
6	Materials provide a comprehensive list of supplies and teacher guidance needed to support instructional activities in a safe manner.							
7	Materials provide teacher guidance for the use of embedded and meaningful technology to support and enhance student learning, when applicable.							
8	Materials and assessments include teacher guidance for students at, approaching, or exceeding grade level expectations.							
9	Materials provide teacher guidance for interpreting student evidence of learning, monitoring student progress and providing feedback to guide student learning and to modify instruction.							
FOCUS AREA 4: STUDENT CENTERED INSTRUCTION Materials are designed for each student's regular and active participation in science content.								
10	Materials provide opportunities to engage students' curiosity and participation in a way that pulls from their prior knowledge and connects their learning to relevant phenomena and problems.							
11	The flow of lessons from one unit to the next is coherent, meaningful, direct, and apparent to students.							
FOCUS AREA 5: EQUITY Materials are designed for all learners.								
12	Materials provide extensions and/or opportunities for all students to engage in learning grade-level/band science and engineering in greater depth.							
13	Materials and assessments are designed in an accessible manner and include multiple ways for all students to build and reflect on science knowledge; multiple ways for all students to access content (Universal Design for Learning); and multiple opportunities for student self-reflection.							

Section 2: All Content Review				
PUBLISHER/PROVIDER INSTRUCTIONS: • The All Content tab will be completed solely by the reviewers. They will score each criterion and provide evidence for their score from the material based on their overall review of the material. You will not provide any citations for this tab. • The material will be scored for alignment with each criterion as “Meets expectations", “Partially meets expectations", or “Does not meet expectations”.				
Criteria #	**All Content Criteria Review**	Score	Required: Reviewer's Evidence from Material	Comments, citations, notes
FOCUS AREA 1: COHERENCE **Instructional materials are coherent and consistent with the New Mexico Content Standards that all students should study in order to be college- and career-ready.**				
1	Instructional materials address the full content contained in the standards for all students by grade level.			
2	Instructional materials support students to show mastery of each standard.			
3	Instructional materials require students to engage at a level of maturity appropriate to the grade level under review.			
4	Instructional materials are coherent, making meaningful connections for students by linking the standards within a lesson and unit.			
FOCUS AREA 2: WELL-DESIGNED LESSONS **Instructional materials take into account effective lesson structure and pacing.**				
5	The Teacher Edition presents learning progressions to provide an overview of the scope and sequence of skills and concepts. The design of the assignments shows a purposeful sequencing of teaching and learning expectations.			
6	Within each lesson of the instructional materials, there are clear, measurable, standards-aligned content objectives.			
7	Within each lesson of the instructional materials, there are clear, measurable language objectives tied directly to the content objectives.			
8	Instructional materials provide focused resources to support students’ acquisition of both general academic vocabulary and content-specific vocabulary.			
9	The visual design of the instructional materials (whether in print or digital) maintains a consistent layout that supports student engagement with the subject.			
10	Instructional materials incorporate features that aid students and teachers in making meaning of the text.			
11	Instructional materials provide students with ongoing review and practice for the purpose of retaining previously acquired knowledge.			
FOCUS AREA 3: RESOURCES FOR PLANNING **Instructional materials provide teacher resources to support planning, learning, and understanding of the New Mexico Content Standards.**				
12	Instructional materials provide a list of lessons in the Teacher Edition (in print or clearly distinguished/ accessible as a teacher's edition in digital materials), cross-referencing the standards addressed and providing an estimated instructional time for each lesson, chapter, and unit.			
13	Instructional materials support teachers with instructional strategies to help guide students’ academic development.			
14	Instructional materials include a teacher edition/ teacher-facing material with useful annotations and suggestions on how to present the content in the student edition/student-facing material and in the supporting material.			
15	Instructional materials integrate opportunities for digital learning, including interactive digital components.			
FOCUS AREA 4: ASSESSMENT **Instructional materials offer teachers a variety of assessment resources and tools to collect ongoing data about student progress related to the standards.**				

16	Instructional materials provide a variety of assessments that measure student progress in all strands of the standards for the content under review. *(Adopted New Mexico Content Standards for 2024: NM STEM Ready Science Standards)*			
17	Instructional materials provide multiple formative and summative assessments, clearly defining which standards are being assessed through content and language objectives.			
18	Instructional materials provide scoring guides for assessments that are aligned with the standards they address, and that offer teachers guidance in interpreting student performance and suggestions for further instruction, differentiation, remediation and/or acceleration.			
19	Instructional materials provide appropriate assessment alternatives for English Learners, Culturally and Linguistically Diverse students, advanced students, and special needs students.			
20	Instructional materials include opportunities to assess student understanding and knowledge of the standards using technology.			
FOCUS AREA 5: EXTENSIVE SUPPORT **Instructional materials give all students extensive opportunities and support to explore key concepts.**				
21	Instructional materials can be customized or adapted to meet the needs of different student populations.			
22	Instructional materials provide differentiated strategies and/or activities to meet the needs of students working below proficiency and those of advanced learners.			
23	Instructional materials provide appropriate linguistic support for English Learners and Culturally and Linguistically Diverse students, and accommodations and modifications for other special populations that will support their regular and active participation in learning content.			
24	Instructional materials provide strategies and resources for teachers to inform and engage parents, family members, and caregivers of all learners about the program and provide suggestions for how they can help support student progress and achievement.			
25	Instructional materials include opportunities for all students that encourage and support critical and creative thinking, inquiry, and complex problem-solving skills.			
FOCUS AREA 6: CULTURAL AND LINGUISTIC PERSPECTIVES **Instructional materials represent a variety of cultural and linguistic perspectives.**				
26	Instructional materials inform culturally and linguistically responsive pedagogy by affirming students' backgrounds in the materials themselves and in the student discussions.			
27	Instructional materials provide a collection of images, stories, and information, representing a broad range of demographic groups, and do not make generalizations or reinforce stereotypes.			
28	Instructional materials provide context, illustrations, and activities for students to make interdisciplinary connections and/or connections to real-life experiences and diverse cultural and linguistic backgrounds.			
FOCUS AREA 7: INCLUSION OF CULTURALLY AND LINGUISTICALLY RESPONSIVE LENS **Instructional materials highlight diversity in culture and language through multiple perspectives.**				
29	Instructional materials include tools and resources to relate the content area appropriately to diversity in culture and language.			
30	Instructional materials include tools and resources that demonstrate multiple perspectives in a specific concept.			
31	Instructional materials engage students in critical reflection about their own lives and societies, including cultures past and present in New Mexico.			
32	Instructional materials address multiple ethnic descriptions, interpretations, or perspectives of events and experiences.			