Instructional Material Bureau
Summer 2011 Adoption Review Institute
Form F: *Publisher Alignment Form & Review Scoring Rubric*
(Science 5)

Publisher information and instructions:

Corporation or Publisher:	**Submitted by (name) :**	
Division or Imprint: **Phone:**	**E-mail:**	
Title of Student Edition:	**ISBN:**	**Lexile Score:**
Title of Teacher Edition:	**ISBN:**	

Alignment contact information:

Completed by (name):	**E-mail:**
Phone:	**Date:**

SECTION I (CONTENT STANDARDS) CITATION REQUIREMENTS AND SCORING

A. Enter three (3) citations (one in each cell) for each indicator; enter the page number and the paragraph.
   a. Example: [123-5] would refer the reviewer to Page 123, paragraph 5 to find the evidence of the indicator.
B. Citations for "Content Standards, Benchmarks & Performance Standards" must refer to the Student Edition.
C. Citations for "Other Relevant Criteria" must refer to the Teacher Edition.
D. Each citation must address an increasing level of cognition:
   a. Citation 1: Cites material that provides **an introduction** to the content at the **basic knowledge and recall** level.
   b. Citation 2: Cites material that **builds on prior knowledge/skills** at the **comprehension and application** level.
   c. Citation 3: Cites material that builds on prior knowledge/skills **and integrates content to meet the standard at the analysis, synthesis, or evaluation** levels.
E. At least two citations must be found satisfactory by the Review Team to meet the requirements of the standard. Scoring will be as follows:
   a. Satisfactory citations at the "Basic Knowledge" level only, or no valid citations, score **zero (0) points**.
   b. Satisfactory citations at both the "Basic Knowledge" and "Application" level score a total of **six (6) points**.
   c. Satisfactory citations at all three levels score a total of **ten (10) points**.

SEE THE BEGINNING OF SECTION II FOR REQUIREMENTS AND SCORING OF "OTHER RELEVANT CRITERIA" CITATIONS

Instructional Material Bureau
Summer 2011 Adoption Review Institute

THIS PAGE FOR REVIEW INSTITUTE STAFF

FACILITATOR USE ONLY

FINAL SCORE VERIFICATION (TO BE COMPLETED BY THE FACILITATOR)		
	Verified: **90% or Higher**	**Facilitator Signature**
	Verified: **89% or Lower**	**Facilitator Signature**

Reviewer Name:	**Reviewer Number:**	**Date:**	**Facilitator:**

REVIEWER INSTRUCTIONS

Enter score in the **"Item Score"** column. Every **numbered item** must be scored. Scoring must follow these criteria:

1. Citations that you verify at the "Basic Knowledge" level only, or no valid citations, score zero (0) points.
2. Citations that you verify at both the "Basic Knowledge" and "Application" level score a total of six (6) points.
3. Citations that you verify at all three levels score a total of ten (10) points.

Enter the total number of points in the "YES" column in the **Page Total Score** box at the bottom of each page.

POINTS	DEFINITION
0	Citations did not meet the requirements of the standard for at least two levels.
6	Citations met the requirements of the standard at two of the levels.
10	Citations met the requirements of the standard at all three levels.

REVIEWER # _____

CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
Strand I: Scientific Thinking and Practice **Standard I:** Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.					
I-A. **Benchmark:** Use scientific methods to develop questions, design and conduct experiments using appropriate technologies, analyze and evaluate results, make predictions, and communicate findings.					
I-A(1). Plan and conduct investigations, including formulating testable questions, making systematic observations, developing logical conclusions, and communicating findings.				1	
I-A(2). Use appropriate technologies (e.g., calculators, computers, balances, spring scales, microscopes) to perform scientific tests and to collect and display data.				2	
I-A(3). Use graphic representations (e.g., charts, graphs, tables, labeled diagrams) to present data and produce explanations for investigations.				3	
I-A(4). Describe how credible scientific investigations use reproducible elements including single variables, controls, and appropriate sample sizes to produce valid scientific results.				4	
I-A(5). Communicate the steps and results of a scientific investigation.				5	
I-B. **Benchmark:** Understand the processes of scientific investigation and how scientific inquiry					

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
results in scientific knowledge.					
I-B(1). Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).				6	
I-B(2). Understand that scientific conclusions are subject to peer and public review.				7	
I-C. **Benchmark:** Use mathematical ideas, tools, and techniques to understand scientific knowledge.					
I-C(1). Use appropriate units to make precise and varied measurements.				8	
I-C(2). Use mathematical skills to analyze data.				9	
I-C(3). Make predictions based on analyses of data, observations, and explanations.				10	
I-C(4). Understand the attributes to be measured in a scientific investigation and describe the units, systems, and processes for making the measurement.				11	
Strand II: The Content of Science **Standard I (Physical Science):** Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.					
I-A. **Benchmark:** Know the forms and properties of matter and how matter interacts.					
I-A(1). Describe properties (e.g., relative volume, ability to flow) of the three states of matter.				12	
I-A(2). Describe how matter changes from one phase to another (e.g., condensation, evaporation).				13	
I-A(3). Know that matter is made up of particles (atoms) that can combine to form				14	

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
molecules and that these particles are too small to see with the naked eye.					
I-A(4). Know that the periodic table is a chart of the pure elements that make up all matter.				15	
I-A(5). Describe the relative location and motion of the particles (atoms and molecules) in each state of matter.				16	
I-A(6). Explain the relationship between temperature and the motion of particles in each state of matter.				17	
I-B. **Benchmark:** Understand the genetic basis for inheritance and the basic concepts of biological evolution.					
I-B(1). Know that heat is transferred from hotter to cooler materials or regions until both reach the same temperature.				18	
I-B(2). Know that heat is often produced as a by-product when one form of energy is converted to another form (e.g., when machines or organisms convert stored energy into motion).				19	
I-B(3). Know that there are different forms of energy.				20	
I-B(4). Describe how energy can be stored and converted to a different form of energy (e.g., springs, gravity) and know that machines and living things convert stored energy to motion and heat.				21	
I-C. **Benchmark:** Understand the characteristics, structures, and functions of cells.					
I-C(1). Understand how the rate of change of position is the velocity of an object in motion.				22	
I-C(2). Recognize that acceleration is the change				23	

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
in velocity with time.					
I-C(3). Identify forces in nature (e.g., gravity, magnetism, electricity, friction).				24	
I-C(4). Understand that when a force (e.g., gravity, friction) acts on an object, the object speeds up, slows down, or goes in a different direction.				25	
I-C(5). Identify simple machines and describe how they give advantage to users (e.g., levers, pulleys, wheels and axles, inclined planes, screws, wedges).				26	
Strand II: The Content of Science **Standard II (Life Science):** Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.					
II-A. **Benchmark:** Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.					
II-A(1). Identify the components of habitats and ecosystems (producers, consumers, decomposers, predators).				27	
II-A(2). Understand how food webs depict relationships between different organisms.				28	
II-A(3). Know that changes in the environment can have different effects on different organisms (e.g., some organisms move, some survive, some reproduce,				29	

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
some die).					
II-A(4). Describe how human activity impacts the environment.				30	
II-B. **Benchmark:** Understand how traits are passed from one generation to the next and how species evolve.					
II-B(1). Know that plants and animals have life cycles that include birth, growth and development, reproduction, and death and that these cycles differ for different organisms.				31	
II-B(2). Identify characteristics of an organism that are inherited from its parents (e.g., eye color in humans, flower color in plants) and other characteristics that are learned or result from interactions with the environment.				32	
II-B(3). Understand that heredity is the process by which traits are passed from one generation to another.				33	
II-C. **Benchmark:** Understand the structure of organisms and the function of cells in living systems.					
II-C(1). Understand that all living organisms are composed of cells from one to many trillions, and that cells are usually only visible thought a microscope.				34	

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
II-C(2). Know that some organisms are made of a collection of similar cells that cooperate (e.g., algae) while other organisms are made of cells that are different in appearance and function (e.g., corn, birds).				35	
II-C(3). Describe the relationships among cells, tissues, organs, organ systems, whole organisms, and ecosystems.				36	
Strand II: The Content of Science **Standard III (Earth and Space Science):** Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.					
III-A. **Benchmark:** Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the solar system, the universe, and their structures.					
III-A(1). Know that many objects in the universe are huge and are separated from one another by vast distances (e.g., many stars are larger than the sun but so distant that they look like points of light).				37	
III-A(2). Understand that Earth is part of a larger solar system, which is part of an even larger galaxy (Milky				38	

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
Way), which is One of many galaxies.					
III-A(3). Know that there have been manned and unmanned journeys to space and to the moon.				39	
III-B. **Benchmark:** Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.					
III-B(1). Understand that water and air relate to Earth's processes, including:					
III-B(1)a. how the water cycle relates to weather				40	
III-B(1)b. how clouds are made of tiny droplets of water, like fog or steam.				41	
III-B(2). Know that air is a substance that surrounds Earth (atmosphere), takes up space, and moves, and that temperature fluctuations and other factors produce wind currents.				42	
III-B(3). Know that most of Earth's surface is covered by water, that most of that water is salt water in oceans, and that fresh water is found in rivers, lakes, underground sources, and glaciers.				43	
III-B(4). Recognize that the seasons are caused by Earth's motion around				44	

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CONTENT STANDARDS, BENCHMARKS & PERFORMANCE STANDARDS	Citation 1 Basic Knowledge	Citation 2 Application	Citation 3 Analysis	Item #	Item Score
the sun and the tilt of Earth's axis of rotation.					
Strand III: Science and Society **Standard I:** Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.					
I-A. **Benchmark** Explain how scientific discoveries and inventions have changed individuals and societies.					
I-A(1). Describe the contributions of science to understanding local or current issues (e.g., watershed and community decisions regarding water use).				45	
I-A(2). Describe how various technologies have affected the lives of individuals (e.g., transportation, entertainment, health).				46	

Reviewer's Section I Totals	

REVIEWER # _____

PUBLISHER: SECTION II CITATION REQUIREMENTS AND SCORING

A. Citations for "Other Relevant Criteria" will usually refer to the Teacher Edition, but may refer to the Student Edition.
B. Enter three (3) citations (one in each cell) for each indicator; enter the page number and the paragraph.
   a. Example: [123-5] would refer the reviewer to +Page 123, paragraph 5 to find the evidence of the indicator.
C. All three citations must be found satisfactory by the Review Team to meet the requirements of the standard.

REVIEWER: USE THE TEACHER'S EDITION AND THE STUDENT EDITION TO CONDUCT THIS PORTION OF THE REVIEW

Mark your score in the "Item Score" column.
KEY:
0 = Citations did not meet the requirements of the standard.
5 = Citations met the requirements of the standard.

SECTION II: OTHER RELEVANT CRITERIA	Citation 1	Citation 2	Citation 3	Item Number	Item Score
A. The textbook provides pictorials, graphics, and illustrations that represent diversity of cultures, race, color, creed, national origin, age, gender, language or disability.	Citation 1	Citation 2	Citation 3	1	
B. The textbook provides a variety of cultural perspectives used within the lesson content.	Citation 1	Citation 2	Citation 3	2	
C. The textbook provides reading selections with activities requiring student responses that promote respect for all people regardless of race, color, creed, national origin, age, gender, language or disability.	Citation 1	Citation 2	Citation 3	3	
D. The textbook presents appropriate role models within content rather than an oversimplified standardized image of a person or group; avoids stereotyping.	Citation 1	Citation 2	Citation 3	4	

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SECTION II: OTHER RELEVANT CRITERIA	Citation 1	Citation 2	Citation 3	Item Number	Item Score
E. The textbook provides an introduction to the lesson including the comprehension questions (i.e. focus questions or guiding questions) the student will be expected to answer at the conclusion of the classroom instruction.	Citation 1	Citation 2	Citation 3	5	
F. The textbook introduces a vocabulary list at the beginning of each lesson.	Citation 1	Citation 2	Citation 3	6	
G. The textbook provides visual aids to assist comprehension.	Citation 1	Citation 2	Citation 3	7	
H. The textbook provides extensive and varied opportunities to practice lesson objectives /targeted skills.	Citation 1	Citation 2	Citation 3	8	
I. The textbook provides the student with ongoing review and practice for the purpose of retaining previously acquired knowledge.	Citation 1	Citation 2	Citation 3	9	
J. The textbook provides writing activities for students to make connections across reading selections and their personal experiences. Some ***examples*** of this might include: 1. discussing/responding to open-ended prompts; 2. tracing cause and effect relationships; 3. comparing real life situations; dramatizing, or; 4. tracing themes, patterns.	Citation 1	Citation 2	Citation 3	10	
K. The textbook provides speaking activities for students to make connections across reading selections and their personal experiences. Some ***examples*** of this might include: • discussing/responding to open-ended prompts; • tracing cause and effect relationships; • comparing real life situations; dramatizing, or; tracing themes, patterns.	Citation 1	Citation 2	Citation 3	11	

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SECTION II: OTHER RELEVANT CRITERIA	Citation 1	Citation 2	Citation 3	Item Number	Item Score
L. The textbook incorporates increasingly complex practice into lessons requiring analysis, evaluation and synthesis.	Citation 1	Citation 2	Citation 3	12	
M. The textbook provides activities that elicit critical thinking, such as, research, defining a problem, examining evidence, analyzing assumptions and biases, avoiding emotional reasoning, avoiding oversimplification, considering other interpretations, tolerating ambiguity, and metacongition.	Citation 1	Citation 2	Citation 3	13	
N. The textbook includes comprehensive laboratory projects and assignments for students.	Citation 1	Citation 2	Citation 3	14	
O. The textbook provides a Reference Section that includes: Glossary, Academic Word List and other relevant information to support student learning.	Citation 1	Citation 2	Citation 3	15	
P. The textbook provides relevant tables such as the periodic table of elements, chart of the elements, classification of plants and animals, and summary pages for relevant content and formulas.	Citation 1	Citation 2	Citation 3	16	
Q. The Teacher's Edition presents an overview of the scope and sequence of skills and concepts.	Citation 1	Citation 2	Citation 3	17	
R. Within each lesson the Teacher's Edition provides articulated **objectives** for varied skill levels of the students.	Citation 1	Citation 2	Citation 3	18	
S. The Teacher's Edition provides instructional support for laboratory projects and assignments for students.	Citation 1	Citation 2	Citation 3	19	
T. The Teacher's Edition provides correlation citations of the New Mexico Science Content Standards, Benchmarks and Performance Standards to the corresponding location in the Student Edition.	Citation 1	Citation 2	Citation 3	20	
U. At the beginning of each unit, chapter or lesson there is a list of standards covered within the unit, chapter or lesson.	Citation 1	Citation 2	Citation 3	21	

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SECTION II: OTHER RELEVANT CRITERIA	Citation 1	Citation 2	Citation 3	Item Number	Item Score
V. The Teacher's Edition provides leveled **activities** for differentiated instructional to meet the needs of all students including struggling and accelerated learners.	Citation 1	Citation 2	Citation 3	22	
W. The Teachers Edition provides instructional strategies for English language learners.	Citation 1	Citation 2	Citation 3	23	
X. The Teacher's Edition includes content and information that support a variety of approaches to instruction, including (score each item separately):					
1. Writing activities	Citation 1	Citation 2	Citation 3	24	
2. Project-based learning assignments	Citation 1	Citation 2	Citation 3	25	
3. Interdisciplinary instruction	Citation 1	Citation 2	Citation 3	26	
4. Thematic instruction across genres	Citation 1	Citation 2	Citation 3	27	
Y. The Teacher's Edition provides the teacher with instructional strategies for every lesson.	Citation 1	Citation 2	Citation 3	28	
Z. The Teacher's Edition provides instructional support for explicitly teaching comprehension.	Citation 1	Citation 2	Citation 3	29	
AA. The Teacher's Edition provides pre and post-tests that cover lesson and/or chapter content.	Citation 1	Citation 2	Citation 3	30	
BB. The Teacher's Edition provides student assessments that are accompanied by an item analysis and score interpretation for the identification of skill areas in need of further instruction.	Citation 1	Citation 2	Citation 3	31	
CC. The Teacher's Edition provides strategies for students to use technology-based knowledge and skills in the curriculum area, such as, student presentations and	Citation 1	Citation 2	Citation 3	32	

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SECTION II: OTHER RELEVANT CRITERIA	Citation 1	Citation 2	Citation 3	Item Number	Item Score
projects.					
Reviewer's Section II Total					Total Section Score
Reviewer's Grand Total					Total Review Score