



# Delta Science Modules (DSM)

CORRELATION  
TO

## ALASKA

SCIENCE PERFORMANCE STANDARDS  
(GRADE LEVEL EXPECTATIONS)  
GRADES 3-8



**DELTA SCIENCE MODULE PROGRAM III  
(DSM)**

**CORRELATION  
TO**

**ALASKA  
SCIENCE PERFORMANCE STANDARDS  
(GRADE LEVEL EXPECTATIONS)  
GRADES 3-8**

The following is a correlation of the Alaska Performance Standards for Science to the Delta Science Module III Program (DSM). This correlation lists representative examples of investigations and activities that address the science content standards. A citation does not necessarily reflect all of the activities from DSM that might address a particular standard.

June, 2007

# GRADE THREE

## A1 – Science as Inquiry and Process

PERFORMANCE STANDARD	DSM
<p><b>The student develops an understanding of the processes of science by:</b></p> <p>[3] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring and communicating.</p> <p>[3] SA1.2 observing and describing their world to answer simple questions.</p> <p><b>The student will demonstrate an understanding of attitudes and approaches to scientific inquiry by:</b></p> <p>[3] SA2.1 answering, “How do you know?” questions with reasonable answers.</p> <p><b>The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by:</b></p> <p>[3] SA3.1 observing local conditions that determine which plants and/or animals survive.(L)</p>	<p>DSM uses an inquiry approach and develops science process skills in all investigations. See for example:</p> <p><b>Force and Motion</b> Activity 4-6, pp. 41-64</p> <p><b>States of Matter</b> Activity 7-11, pp. 57-96</p> <p><b>Magnets</b> Activity 1-4, pp. 13-34</p> <p><b>Sink or Float</b> Activity 2-5, pp. 21-51</p> <p><b>Classroom Plants</b> Activity 3-5, pp. 29-53</p> <p><b>Soil Science</b> Activity 1-4, pp. 15-44</p> <p><b>Electrical Circuits</b> Activity 1-4, pp. 13-43</p> <p><b>Food Chains and Webs</b> Activity 2-3, pp. 23-37</p> <p><b>Classroom Plants</b> Activity 3-5, pp. 29-53</p> <p><b>Using Your Senses</b> Activity 8-12, pp. 67-103</p> <p><b>Water Cycle</b> Activity 4-6, pp. 39-60</p> <p><b>Sound</b> Activity 9-11, pp. 73-98</p> <p><b>Classroom Plants</b> Activity 5, pp. 29-53</p> <p><b>Plant and Animal Populations</b> Activity 4-7, pp. 43-76</p> <p><b>Food Chains and Webs</b> Activity 2-3, 5, pp. 23-37, 47-52</p>

## B1 – Concepts of Physical Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the structure and properties of matter by:</b></p> <p>[3] SB1.1 classifying matter according to physical properties (i.e., color, size, shape, weight, texture, flexibility).</p>	<p><b>Sink or Float</b> Activity 1, pp. 13-19 Reader, pp. 7-8</p> <p><b>Soil Science</b> Activity 1, 4, pp. 15-20, 37-44 Reader, pp. 7-8</p> <p><b>Electrical Connections</b> Activity 6-7, pp. 51-62</p> <p><b>Magnets</b> Activity 2, pp. 19-23</p>
<p><b>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:</b></p> <p>[3] SB2.1 classifying materials as insulators or conductors (i.e., fur, metal, wood, plastic) and identifying their applications.</p>	<p>DSM provides the opportunity to address this standard. See below:</p> <p><b>States of Matter</b> Activity 5, pp. 41-50 Activity 5, Science Challenge, p. 50</p>
<p><b>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:</b></p> <p>[3] SB3.1 recognizing that temperature changes cause changes in phases of substances (e.g., ice changing to liquid, water changing to water vapor, and vice versa).</p>	<p><b>States of Matter</b> Activity 4-5, 7-12, pp. 35-50, 57-101 Reader, pp. 8-10</p> <p><b>Weather Watching</b> Reader, pp. 4-5</p> <p><b>Water Cycle</b> Activity 4, 8-9, 11-13, pp. 39-44, 69-83, 91-114 Reader, pp. 8-11</p>
<p><b>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:</b></p> <p>[3] SB4.2 recognizing that objects can be moved without being touched (e.g. using magnets, falling objects, static electricity).</p>	<p><b>Sink or Float</b> Activity 1, pp. 13-19 Reader, pp. 7-8</p> <p><b>Electrical Circuits</b> Activity 2, Science Extension, p. 25</p> <p><b>Magnets</b> Activity 1-3, pp. 13-28 Reader, pp. 2-3, 8-10, 15</p>

## C1 – Concepts of Life Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:</b></p> <p>[3] SC1.1 sorting Alaskan plants and/or animals using physical characteristics (e.g., leaves, beaks). (L)</p> <p>[3] SC1.2 describing how some traits (e.g., claws, teeth, camouflage) of living organisms have helped them survive as a species.</p> <p><b>The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:</b></p> <p>[3] SC2.1 sorting animals and plants into groups based on appearance and behaviors.</p> <p>[3] SC2.2 observing and comparing external features of plants and of animals that may help them grow, survive, and reproduce.</p>	<p>Local Objective See below for DSM examples:</p> <p><b>Butterflies and Moths</b> Activity 12, pp. 105-110 Reader, pp. 4-7</p> <p><b>Plant and Animal Populations</b> Activity 10-11, pp. 95-110</p> <p><b>Plant and Animal Life Cycles</b> Reader, pp. 4-12</p> <p><b>Classroom Plants</b> Activity 6-9, 11, pp. 55-86, 97-104 Reader, pp. 6-12</p> <p><b>Plant and Animal Populations</b> Activity 4-7, pp. 43-76 Reader, pp. 5-7</p> <p><b>Butterflies and Moths</b> Activity 3, 7-8, pp. 31-38, 61-77</p> <p><b>Dinosaurs and Fossils</b> Activity 8, pp. 61-66 Reader, pp. 8-11</p> <p><b>Food Chains and Webs</b> Activity 4-6, pp. 39-58 Reader, pp. 4-5</p> <p><b>Plant and Animal Populations</b> Activity 1, 10-11, pp. 15-23, 95-110 Reader, p. 10</p> <p><b>Butterflies and Moths</b> Activity 12, pp. 105-110 Reader, pp. 4-7</p> <p><b>Dinosaurs and Fossils</b> Activity 10, pp. 75-82 Reader, pp. 6-11</p> <p><b>Plant and Animal Life Cycles</b> Activity 11, pp. 97-103 Reader, pp. 4-12</p> <p><b>Classroom Plants</b> Activity 6-9, 11, pp. 55-86, 97-104 Reader, pp. 6-12</p> <p><b>Plant and Animal Populations</b> Activity 4-7, pp. 43-76 Reader, pp. 5-7</p>

<p><b>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:</b></p> <p>[3] SC3.1 identifying and sorting examples of living and non-living things in the local environment. (L)</p> <p>[3] SC3.2 organizing a simple food chain of familiar plants and animals. (L)</p>	<p><b>Butterflies and Moths</b> Activity 3, 7-8, pp. 31-38, 61-77</p> <p><b>Dinosaurs and Fossils</b> Activity 8, pp. 61-66 Reader, pp. 8-11</p> <p><b>Food Chains and Webs</b> Activity 4-6, pp. 39-58 Reader, pp. 4-5</p> <p>Local Objective See DSM examples below:</p> <p><b>Classroom Plants</b> Activity 3-5, pp. 29-53</p> <p><b>Plant and Animal Populations</b> Activity 1-7, pp. 15-76 Reader, pp. 1, 4, 8-9</p> <p><b>Plant and Animal Life Cycles</b> Activity 1, 12, pp. 15-21, 105-113 Reader, pp. 8-11</p> <p><b>Food Chains and Webs</b> Activity 1-3, pp. 15-37 Reader, pp. 1-4</p> <p><b>Plant and Animal Populations</b> Activity 10-12, pp. 95-117 Reader, pp. 10-13</p> <p><b>Food Chains and Webs</b> Activity 11-12, pp. 89-101 Reader, pp. 6-9</p>
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### D1 – Concepts of Earth Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of geochemical cycles by:</b></p> <p>[3] SD1.1 recognizing that most rocks are composed of combinations of different substances.</p> <p>[3] SD1.2 describing the water cycle to show that water circulates through the crust, oceans, and atmosphere of Earth.</p>	<p><b>Soil Science</b> Activity 5, pp. 45-50 Reader, p. 2</p> <p><b>Earth Movements</b> Activity 3, pp. 29-37</p> <p><b>Weather Watching</b> Reader, pp. 4-5</p> <p><b>Water Cycle</b> Activity 1-3, 5-6, 8-9, 11-13, pp. 13-37, 45-60, 69-83, 91-114 Reader, pp. 2-12</p> <p><b>Weather Instruments</b> Activity 11, pp. 89-96 Reader, p. 6</p>

<p><b>The student demonstrates an understanding of the forces that shape Earth by:</b></p> <p>[3] SD2.1 identifying and comparing a variety of Earth’s land features (i.e., rivers, deltas, lakes, glaciers, mountains, valleys, and islands).</p> <p><b>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by:</b></p> <p>[3] SD3.1 using recorded weather patterns (e.g., temperature, cloud cover, or precipitation) to make reasonable predictions. (L)</p> <p><b>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:</b></p> <p>[3] SD4.1 recognizing that objects appear smaller the farther away they are.</p> <p>[3] SD4.2 recognizing that objects have properties, locations, and movements that can be observed and described.</p> <p>[3] SD4.3 recognizing and using appropriate instruments of magnification (e.g., binoculars and telescopes). (L)</p>	<p><b>Soil Science</b> Reader, p. 5</p> <p><b>Earth Movements</b> Activity 9-10, pp. 79-96 Reader, pp. 4-5, 10-11</p> <p><b>Water Cycle</b> Activity 1, pp. 13-21 Reader, pp. 1-4</p> <p><b>Weather Watching</b> Activity 2-6, 12, pp. 21-59, 109-116</p> <p><b>Weather Instruments</b> Activity 1-6, 10, 12, pp. 13-57, 81-87, 97-101</p> <p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Solar System</b> Activity 1, 6, 11, pp. 13-20, 51-58, 93-100 Reader, pp. 3-13, 15</p> <p><b>Solar System</b> Activity 1-2, 6, 8-12, pp. 13-26, 51-58, 65-110 Reader, pp. 2-13</p> <p><b>Solar System</b> Activity 3, Science and Careers, p. 34 Reader, p. 15</p>
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### E1 – Science and Technology

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:</b></p> <p>[3] SE1.1 identifying problems and discussing solutions. (L)</p>	<p><b>Sink or Float</b> Activity 9-12, pp. 75-107</p> <p><b>States of Matter</b> Activity 5, pp. 41-50 Activity 5, Science Challenge, p. 50</p> <p><b>Force and Motion</b> Activity 5, pp. 49-55 Activity 12, Science Challenge, p. 117</p>

<p><b>The student demonstrates an understanding that solving problems involves different ways of thinking, perspective, and curiosity by:</b></p> <p>[3] SE2.1 identifying local tools and materials used in everyday life. (L)</p> <p><b>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:</b></p> <p>[3] SE3.1 listing the positive and negative effects of a single technological development in the local community (e.g., fish trap, fish wheel, four-wheeler, computer). (L)</p>	<p><b>Electrical Circuits</b> Activity 12, pp. 89-94</p> <p><b>Magnets</b> Activity 11, pp. 71-76</p> <p><b>Sound</b> Activity 12, pp. 97-105</p> <p><b>Weather Watching</b> Activity 2-3, pp. 21-36</p> <p><b>States of Matter</b> Activity 5, pp. 41-50</p> <p><b>Solar System</b> Activity 3-4, pp. 27-42</p> <p><b>Weather Instruments</b> Activity 1-3, pp. 13-36</p> <p><b>Sound</b> Activity 12, pp. 97-105</p> <p><b>Force and Motion</b> Activity 9, Science and Health, p. 90</p> <p><b>Magnets</b> Activity 10, Science and Health, p. 70 Activity 11. Science, Technology and Society, p. 76</p> <p><b>Electrical Circuits</b> Activity 2, Science and Health, p. 25 Activity 11, Science, Technology and Society, p. 88</p>
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**F1- Cultural, Social, Personal Perspectives, and Science**

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by:</b></p> <p>[3] SF1.1-SF3.1 exploring local or traditional stories that explain a natural event. (L) Cross referenced with SA3.1</p>	



# GRADE FOUR

## A1 – Science as Inquiry and Process

PERFORMANCE STANDARD	DSM
<p><b>The student develops an understanding of the processes of science by:</b></p> <p>[4] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.</p> <p>[4] SA1.2 observing, measuring and collecting data from explorations and using this information to classify, predict, and communicate.</p> <p><b>The student will demonstrate an understanding of attitudes and approaches to scientific inquiry by:</b></p> <p>[4] SA2.1 supporting their ideas with observations and peer review. (L)</p> <p><b>The student demonstrates an understanding that interactions with the environment provides an opportunity for understanding scientific concepts by:</b></p> <p>[4] SA3.1 identifying the local limiting factors (e.g., weather, human influence, species interactions) that determine which plants and /or animals survive. (L)</p>	<p>DSM uses an inquiry approach and develops science process skills in all investigations. See for example:</p> <p><b>Earth Movements</b> Activity 3-4, pp.29-46</p> <p><b>Water Cycle</b> Activity 4-5, pp. 39-51</p> <p><b>Magnets</b> Activity 1-4, pp. 13-34</p> <p><b>Sound</b> Activity 9-11, pp. 73-98</p> <p><b>Weather Instruments</b> Activity 1, 6, pp.13-21, 51-57</p> <p><b>Dinosaurs and Fossils</b> Activity 6-7, pp. 47-60</p> <p><b>Magnets</b> Activity 1-4, pp. 13-43</p> <p><b>Food Chains and Webs</b> Activity 2-3, pp. 23-37</p> <p>DSM provides the opportunity to address this standard. Activities require observations and post-activity peer review. See examples below:</p> <p><b>Electrical Circuits</b> Activity 6-9, pp. 51-76</p> <p><b>Magnets</b> Activity 11, pp. 71-76</p> <p><b>Sound</b> Activity 9-11, pp. 73-98</p> <p><b>Earth Movements</b> Activity 3-4, pp. 29-46</p> <p><b>Food Chains and Webs</b> Activity 2-3, pp. 23-37</p>

## B1 – Concepts of Physical Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the structure and properties of matter by:</b></p> <p>[4] SB1.1 identifying and comparing the characteristics of gases, liquids, and solids.</p> <p><b>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:</b></p> <p>[4] SB2.1 investigating the effectiveness of different insulating and conducting materials with respect to heat flow and record the results. (L)</p> <p><b>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:</b></p> <p>[4] SB3.1 explaining that temperature changes cause changes in phases of substances (e.g., ice changing to liquid water and liquid water to water vapor).</p> <p><b>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:</b></p> <p>[4] SB4.1 simulating the changes in speed or direction of motion are caused by forces. (L)</p>	<p><b>Water Cycle</b> Reader, pp. 8-9</p> <p><b>Water Cycle</b> Activity 4-5, 8, 11-13, pp. 39-51, 69-76, 91-114 Reader, pp. 8-9 <b>Weather Instruments</b> Activity 7, pp. 59-66 Reader, p. 6</p> <p><b>Magnets</b> Activity 1-4, pp. 13-34 <b>Weather Instruments</b> Activity 4-5, pp. 37-50</p>

## C1 – Concepts of Life Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:</b></p> <p>[4] SC1.1 showing the relationship between physical characteristics of Alaskan organisms and the environment in which they live.</p> <p>[4] SC1.2 describing fossil evidence (e.g., casts, track ways, imprints, etc.) of extinct organisms.</p>	<p>Local Objective</p> <p><b>Dinosaurs and Fossils</b> Activity 2, pp. 21-28 Reader, pp. 4-5, 13-15</p>

<p><b>The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:</b></p> <p>[4] SC2.1 choosing appropriate tools (i.e., hand lens, microscopes, ruler, balance) to examine the basic structural components (e.g., stems, leaves, fish scales, wings) of living things.</p> <p>[4] SC2.2 describing the basic characteristics and requirements of living things.</p> <p><b>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:</b></p> <p>[4] SC3.1 identifying examples of living and non-living things <u>and the relationship between them</u> (e.g., living things need water, herbivores need plants)</p> <p>[4] SC3.2 identifying a simple food chain, diagramming how energy flows through it, and describing the effects of removing one link</p>	<p><b>Earth Movements</b> Activity 3, pp. 29-37</p> <p><b>Food Chains and Webs</b> Activity 1-10, pp. 15-87 <b>Plant and Animal Life Cycles</b> Activity 3-6, 8, pp. 33-63, 75-82</p> <p><b>Food Chains and Webs</b> Activity 2-12, pp. 23-101 Reader, pp. 6-9 <b>Plant and Animal Life Cycles</b> Activity 1-5, pp. 15-56 Reader, pp. 2-13</p> <p><b>Food Chains and Webs</b> Activity 1-12, pp. 15-101 Reader, pp. 4-9, 15 <b>Plant and Animal Life Cycles</b> Activity 1-5, pp. 15-56 Reader, pp. 2-13</p> <p><b>Food Chains and Webs</b> Activity 11-12, pp. 89-101 Reader, pp. 6-9</p>
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### D1 – Concepts of Earth Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of geochemical cycles by:</b></p> <p>[4] SD1.1 describing that most smaller rocks come from the breaking and weathering of larger rocks as part of the rock cycle.</p> <p>[4] SD1.2 recognizing the physical properties of water as they relate to the rock cycle.</p> <p><b>The student demonstrates an understanding of the forces that shape Earth by:</b></p> <p>[4] SD2.1 observing models of how waves, wind, water, and ice shape and reshape the Earth's surface by eroding rock and soil. (L)</p>	<p><b>Earth Movements</b> Reader, pp. 12-13, 15</p> <p>This standard is addressed in the grade 5 module <u>Erosion</u>.</p> <p><b>Earth Movements</b></p>

<p>[4] SD2.2 identifying causes (i.e., earthquakes, tsunamis, volcanoes, floods, landslides, and avalanches) of rapid changes on the surface.</p> <p><b>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by:</b></p> <p>[4] SD3.1 recognizing changes to length of daylight over time and its relationship to seasons.</p> <p>[4] SD3.2 observing that heat flows from one object to another. (L)</p> <p><b>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:</b></p> <p>[4] SD4.1 recognizing that stars are like the sun but are so far away that they look like points of light.</p> <p>[4] SD4.2 recognizing that objects have properties, locations, and movements that can be observed and described.</p> <p>[4] SD4.3 recognizing and using appropriate instruments of magnification (e.g., binoculars and telescopes). (L)</p>	<p>Reader, pp. 12-13</p> <p><b>Earth Movements</b> Activity 10-11, pp. 87-103 Reader, pp. 9-11</p> <p><b>Solar System</b> Activity 9, Science Challenge, p. 80 Reader, p. 3</p> <p><b>Weather Instruments</b> Activity 6, Science Challenge, p. 57</p> <p><b>Solar System</b> Activity 11-12, pp. 93-110 Reader, pp. 2-3</p> <p><b>Solar System</b> Activity 1-2, 6, 8-12, pp. 13-26, 51-58, 65-110 Reader, pp. 2-13</p> <p><b>Solar System</b> Activity 3, Science and Careers, p. 34 Reader, p. 15</p>
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### E1 – Science and Technology

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:</b></p> <p>[4] SE1.1 recognizing that tools (e.g., spear, hammer, hand lens, kayak, computer) and processes (e.g., drying fish, sewing, photography) are an important part of human cultures.</p>	<p><b>Sound</b> Reader, p. 14</p> <p><b>Weather Instruments</b> Activity 1-2, pp. 13-29 Activity 1, Science and Language Arts, p. 26 Activity 2, Science and the Arts, p. 29 Reader, pp. 3-5, 7-9</p> <p><b>Solar System</b> Reader, p. 15</p> <p><b>Magnets</b> Activity 12, Science, Technology and Society, p. 81 Reader, pp. 8-11, 14</p>

<p><b>The student demonstrates an understanding that solving problems involves different ways of thinking, perspective, and curiosity by:</b></p> <p>[4] SE2.1 identifying the function of a variety of tools (e.g., spear, hammer, hand lens, kayak, computer).</p> <p>[4] SE 2.2 identifying multiple explanations (e.g., oral traditions, folklore, scientific theory) of everyday events (e.g., weather, seasonal changes). (L)</p> <p><b>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:</b></p> <p>4] SE3.1 listing the positive and negative effects of a <u>scientific</u> discovery.</p>	<p><b>Electrical Circuits</b> Reader, pp. 10-11</p> <p><b>Sound</b> Reader, p. 14</p> <p><b>Weather Instruments</b> Activity 1-2, pp. 13-29 Reader, pp. 3-5, 7-9, 14</p> <p><b>Solar System</b> Activity 3, Science and Careers, p. 34 Reader, p. 15</p> <p><b>Magnets</b> Reader, pp. 8-11, 14</p> <p><b>Electrical Circuits</b> Reader, pp. 10-11</p> <p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Magnets</b> Activity 10, Science and Health, p. 70 Activity 11, Science, Technology and Society, p. 76</p> <p><b>Electrical Circuits</b> Reader, p. 15</p>
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### F1 – Cultural, Social, Personal Perspectives, and Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by:</b></p> <p>[4] SF1.1-SF3.1 <u>connecting observations of nature to a local or traditional story</u> that explains a natural event (e.g., animal adaptation, weather, rapid changes to Earth's surface). (L) Cross referenced with SA3.1, grades 3 and 6, 4.</p>	

## G1 – History and Nature of Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by:</b></p> <p>[4] SG2.1 recognizing the need for repeated measurements.</p>	<p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Dinosaurs and Fossils</b> Activity 6-7, pp. 47-60</p> <p><b>Weather Instruments</b> Activity 1, pp. 13-21</p> <p><b>Water Cycle</b> Activity 5, pp. 45-51</p> <p><b>Magnets</b> Activity 4, pp. 29-34</p>
<p><b>The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by:</b></p> <p>[4] SG4.1 using an account of a discovery to recognize that an individual's (e.g., George Washington Carver, Marie Curie) curiosity led to advancements in science.</p>	<p><b>Weather Instruments</b> Reader, pp. 10-11</p> <p><b>Water Cycle</b> Reader, p. 13</p> <p><b>Plant and Animal Life Cycles</b> Reader, p. 14</p> <p><b>Earth Movements</b> Reader, p. 14</p>

# GRADE FIVE

## A1 – Science as Inquiry and Process

PERFORMANCE STANDARD	DSM
<p><b>The student develops an understanding of the processes of science by:</b></p> <p>[5] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.</p> <p>[5] SA1.2 using quantitative and qualitative observations to create their own inferences and predictions.</p> <p><b>The student will demonstrate an understanding of attitudes and approaches to scientific inquiry by:</b></p> <p>[5] SA2.1 supporting their statements with facts from a variety of resources and by identifying their sources. (L)</p> <p><b>The student demonstrates an understanding that interactions with the environment provides an opportunity for understanding scientific concepts by:</b></p> <p>[5] SA3.1 <u>identifying the limiting factors</u> (e.g., weather, human influence, species interactions) that determine which plants and /or animals survive.</p>	<p>DSM uses an inquiry approach and develops science process skills in all investigations. See for example:</p> <p><b>Erosion</b> Activity 3-7, pp. 29-66</p> <p><b>Simple Machines</b> Activity 2-7, pp. 19-63</p> <p><b>Oceans</b> Activity 2-6, pp. 23-73</p> <p><b>Weather Forecasting</b> Activity 3-5, pp. 25-48</p> <p><b>Pollution</b> Activity 10, pp. 71-76</p> <p><b>You and Your Body</b> Activity 3-6, pp. 27-54</p> <p><b>Flight and Rocketry</b> Activity 8-9, pp. 81-97</p> <p><b>Color and Light</b> Activity 2-5, pp. 19-52</p> <p>DSM provides the opportunity to address this standard. See below:</p> <p><b>You and Your Body</b> Activity 3, Science and Language Arts, p. 31 Activity 11, Science and Social Studies, p. 84</p> <p><b>Oceans</b> Activity 7, Science and Social Studies, p. 88</p> <p><b>Color and Light</b> Activity 8, Science and Social studies, p. 76</p> <p><b>Pollution</b> Activity 6, 10, pp. 47-52, 71-76 Reader, pp. 2, 7, 9-11, 14</p>

## B1 – Concepts of Physical Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the structure and properties of matter by:</b></p> <p>[5] SB1.1 comparing models that represent matter as solids, liquids, or gases and the changes from one state to another. (L)</p> <p><b>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:</b></p> <p>[5] SB2.1 classifying the changes (i.e., heat, light, sound, and motion) that electrical energy undergoes in common household appliances (i.e., toaster, blender, radio, light bulb, heater).</p> <p><b>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:</b></p> <p>[5] SB3.1 identifying physical and chemical changes based on observable characteristics (e.g., tearing paper vs. burning paper).</p> <p><b>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:</b></p> <p>[5] SB4.1 investigating that the greater the force acting on an object, the greater the change in motion will be. (L)</p>	<p>This standard is addressed in the grade six module <u>Matter and Change</u>.</p> <p><b>Electromagnetism</b> Activity 8-10, pp. 57-76 Activity 7, Science, Technology and Society, p. 56 Reader, pp. 4-5, 9, 13, 15</p> <p>DSM provides the opportunity to address this standard. See below: <b>Erosion</b> Activity 1, pp. 13-19 <b>Rocks and Minerals</b> Activity 6, pp. 47-64 <b>Oceans</b> Activity 2, pp. 23-30</p> <p><b>Flight and Rocketry</b> Activity 8-9, 12, pp. 81-97, 121-130 <b>Simple Machines</b> Activity 1-2, 4, 6, 8, pp. 1-24, 33-37, 49-55, 65-69</p>

## C1 – Concepts of Life Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:</b></p> <p>[5] SC1.1 contrasting inherited traits (e.g., flower color, number of limbs) with those that</p>	<p>This standard is addressed in the grade six module <u>DNA-From Genes to Proteins</u>.</p>

<p>are not (riding a bike, scar from an accident).</p> <p>[5] SC1.2 making reasonable inferences about fossil organisms based on physical evidence.</p> <p><b>The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:</b></p> <p>[5] SC2.1 identifying and sorting animals into groups using basic external and internal features.</p> <p>[5] SC2.2 explaining how external features and internal systems (i.e., respiratory, excretory, skeletal, circulatory and digestive) of plants and animals may help them grow, survive, and reproduce.</p> <p>[5] SC2.3 recognizing that organisms are composed of cells.</p> <p><b>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:</b></p> <p>[5] SC3.1 diagramming how matter and energy are transferred within and between living and nonliving things.</p> <p>[5] SC3.2 organizing a simple food chain of familiar plants and animals <u>that traces the source of the energy back to sunlight.</u></p>	<p><b>Rocks and Minerals</b> Reader, p. 15 This standard is addressed in the grade four module <u>Dinosaurs and Fossils.</u></p> <p>This standard is addressed in the grade four module <u>Dinosaurs and Fossils</u> and the grade six module <u>Plants in Our World.</u></p> <p><b>You and Your Body</b> Activity 1-2, 4, 6-8, pp. 13-25, 33-39, 49-66 Reader, pp. 2-11</p> <p>This standard is addressed in the grade six modules <u>DNA-From Genes to Proteins and Plants in Or World.</u></p> <p>This standard is addressed in the grade four module <u>Food Chains and Webs.</u></p> <p>This standard is addressed in the grade four module <u>Food Chains and Webs.</u></p>
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### D1 – Concepts of Earth Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of geochemical cycles by:</b></p> <p>[5] SD1.1 observing a model of the rock cycle showing that smaller rocks come from the breaking and weathering of larger rocks and that smaller rocks (e.g., sediments and sands) may combine with plant materials to form soil. (L)</p> <p><b>The student demonstrates an understanding of the forces that shape Earth by:</b></p>	<p><b>Rocks and Minerals</b> Activity 2, pp. 21-27 Reader, pp. 9-13</p> <p><b>Erosion</b> Activity 1, 9, pp. 13-19, 75-81 Reader, pp. 5-7</p>

<p>[5] SD2.1 describing how wind and water tear down and build up the Earth's surface resulting in new land formations (i.e., deltas, moraines, and canyons).</p> <p><b>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth's position and motion in our solar system by:</b></p> <p>[5] SD3.1 observing a model that shows how the regular and predictable motion of the Earth and moon determine the apparent shape (phases) of the moon over time. (L)</p> <p>[5] SD3.2 comparing heat absorption and loss by land and water.</p> <p><b>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:</b></p> <p>[5] SD4.1 distinguishing between stars, planets, moons, comets, and meteors. (L)</p> <p>[5] SD4.2 recognizing that the Earth is in regular and predictable motion and this motion explains the length of a day and year.</p> <p>[5] SD4.3 recognizing and using appropriate instruments of magnification (e.g., binoculars and telescopes). (L)</p>	<p><b>Erosion</b> Activity 1-2, 5-6, 10-12, pp. 13-27, 43-57, 83-104 Reader, pp. 5-13</p> <p>This standard is addressed in the grade six module <u>Earth, Moon and Sun</u>.</p> <p><b>Oceans</b> Reader, p. 10</p> <p>This standard is addressed in the grade six module <u>Earth, Moon and Sun</u>.</p> <p>This standard is addressed in the grade six module <u>Earth, Moon and Sun</u>.</p> <p>This standard is addressed in the grade six modules <u>Earth, Moon and Sun</u> and <u>Astronomy</u>.</p>
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### E1 – Science and Technology

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:</b></p> <p>[5] SE1.1 identifying a community problem or issue and describing the information needed to develop a scientific solution. (L)</p> <p><b>The student demonstrates an understanding that solving problems involves different ways of thinking, perspective, and curiosity by:</b></p>	<p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Pollution</b> Activity 1-3, pp. 13-30</p> <p><b>Electromagnetism</b> Activity 5, Science and Health, p. 42</p> <p><b>Oceans</b> Activity 6, Science, Technology and Society, p. 73</p>

<p>[5] SE2.1 investigating a problem or project over a specified period of time and identifying the tools and processes used in that project. (L)</p> <p>[5] SE 2.2 comparing multiple explanations (e.g., oral traditions, folklore, scientific theory) of everyday events (e.g., weather, seasonal changes). (L)</p> <p><b>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:</b></p> <p>[5] SE3.1 describing the various effects of an innovation (e.g., snow machines, airplanes, immunizations) on the safety, health, and environment of the local community. (L)</p>	<p><b>Oceans</b> Activity 10, Science Challenge, p. 124</p> <p><b>Pollution</b> Activity 12, pp. 83-88</p> <p><b>Simple Machines</b> Activity 12, Science Challenge, p. 95</p> <p><b>Flight and Rocketry</b> Activity 5, pp. 55-64 Activity 5, Reinforcement, p. 63 Activity 10, pp. 99-109</p> <p><b>Weather Instruments</b> Activity 11, pp. 81-86 Activity 11, Science and Language Arts, p. 86</p> <p><b>Simple Machines</b> Reader, p. 11</p> <p><b>Electromagnetism</b> Activity 5, Science and Health, p. 42 Activity 9, Science and Social Studies, p. 68 Reader, pp. 10-12, 14-15</p> <p><b>Pollution</b> Activity 4, Science, Technology and Society, p. 38 Reader, pp. 4, 7-11, 13</p> <p><b>Flight and Rocketry</b> Reader, pp. 10-13, 15</p>
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**F1 – Cultural, Social, Personal Perspectives, and Science**

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by:</b></p> <p>[5] SF1.1-SF3.1 telling a local or traditional story that explains a natural event (e.g., animal adaptation, weather, rapid changes to Earth’s surface) and <u>relating it to a scientific explanation</u>. (L) Cross referenced with SA3.1</p>	<p><b>Weather Instruments</b> Activity 11, pp. 81-86 Activity 11, Science and Language Arts, p. 86</p>

## G1 – History and Nature of Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by:</b></p> <p>[5] SG2.1 reviewing and recording results of investigations into the natural world.</p> <p><b>The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by:</b></p> <p>[5] SG4.1 investigating that scientists' curiosity led to advancements in science. (L)</p>	<p><b>Pollution</b> Activity 10, pp. 71-76</p> <p><b>You and Your Body</b> Activity 3-6, pp. 27-54</p> <p><b>Color and Light</b> Activity 2-5, pp. 19-52</p> <p><b>Erosion</b> Activity 10-12, pp. 83-104</p> <p><b>You and Your Body</b> Reader, p. 12</p> <p><b>Color and Light</b> Reader, p. 14</p> <p><b>Flight and Rocketry</b> Reader, p. 14</p> <p><b>Pollution</b> Reader, p. 14</p>

# GRADE SIX

## A1 – Science as Inquiry and Process

PERFORMANCE STANDARD	DSM
<p><b>The student develops an understanding of the processes of science by:</b></p> <p>[6] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.</p> <p>[6] SA1.2 collaborating to design and conduct simple repeatable investigations. (L)</p>	<p>DSM uses an inquiry approach and develops science process skills in all investigations. See for example:</p> <p><b>Erosion</b> Activity 3-7, pp. 29-66</p> <p><b>Simple Machines</b> Activity 2-7, pp. 19-63</p> <p><b>Oceans</b> Activity 2-6, pp. 23-73</p> <p><b>Earth Processes</b> Activity 3-7, pp. 29-69</p> <p><b>Plants in Our World</b> Activity 1-4, pp. 13-47</p> <p><b>Earth Moon and Sun</b> Activity 1-6, pp. 13-60</p> <p><b>You and Your Body</b> Activity 3-6, pp. 27-54</p> <p><b>Flight and Rocketry</b> Activity 8-9, pp. 81-97</p> <p><b>Color and Light</b> Activity 2-5, pp. 19-52</p> <p><b>Newton’s Toy Box</b> Activity 7-8, pp. 49-59</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Matter and Change</b> Activity 11-12, pp. 93-104</p>
<p><b>The student will demonstrate an understanding of attitudes and approaches to scientific inquiry by:</b></p> <p>[6] SA2.1 Identifying and differentiating fact from opinion.</p>	<p>DSM provides the opportunity to address this standard. See below:</p> <p><b>You and Your Body</b> Activity 3-6, pp. 27-54</p> <p><b>Flight and Rocketry</b> Activity 8-9, pp. 81-97</p> <p><b>Color and Light</b> Activity 2-5, pp. 19-52</p> <p><b>Newton’s Toy Box</b> Activity 7-8, pp. 49-59</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Matter and Change</b> Activity 11-12, pp. 93-104</p>
<p><b>The student demonstrates an</b></p>	

<p><b>understanding that interactions with the environment provides an opportunity for understanding scientific concepts by:</b></p> <p>[6] SA3.1 gathering data to build a knowledge base that contributes to the development of questions about the local environment (e.g., moose browsing, trail usage, river erosion). (L)</p>	<p><b>Pollution</b> Activity 1-12, pp. 13-88 Reader, PP. 2-15</p> <p><b>Erosion</b> Activity 1-12, pp. 13-104 Reader, pp. 2-15</p> <p><b>Rocks and Minerals</b> Activity 1-11, pp. 13-92 Reader, pp. 2-13</p> <p><b>Earth Processes</b> Activity 1-6, pp. 13-62 Reader, pp. 2-20</p> <p><b>Plants in Our World</b> Activity 5-12, pp. 49-107 Reader, pp. 2-21</p>
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### B1 – Concepts of Physical Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the structure and properties of matter by:</b></p> <p>[6] SB1.1 using models to represent matter as it changes from one state to another.</p> <p><b>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:</b></p> <p>[6] SB2.1 recognizing that energy can exist in many forms (i.e., heat, light, chemical, electrical, mechanical).</p> <p><b>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:</b></p> <p>[6] SB3.1 recognizing that most substances can exist as a solid, liquid, or gas depending on</p>	<p><b>Matter and Change</b> Reader, p. 12</p> <p><b>Pollution</b> Reader, p. 15</p> <p><b>Electromagnetism</b> Activity 1, 6, pp. 13-17, 43-48 Reader, p. 1-9</p> <p><b>Color and Light</b> Activity 1, pp. 13-18 Reader, pp. 2-3, 8-9</p> <p><b>Electrical Connections</b> Activity 1-2, pp. 13-26 Reader, pp. 1-7, 11-13, 16</p> <p><b>Newton's Toy Box</b> Activity 8-10, pp. 55-72 Reader, p. 14</p> <p><b>Matter and Change</b> Reader, pp. 10-12</p>

<p>temperature.</p> <p><b>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:</b></p> <p>[6] SB4.2 stating that every object exerts gravitational force on every other object.</p> <p>[6] SB4.3 making waves move through a variety of media. (L)</p>	<p><b>Flight and Rocketry</b> Activity 2, pp. 23-32 Reader, p. 4</p> <p><b>Simple Machines</b> Reader, p. 2</p> <p><b>Earth, Moon and Sun</b> Reader, p. 5</p> <p><b>Newton's Toy Box</b> Activity 2, pp. 19-23 Reader, p. 8</p>
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### C1 – Concepts of Life Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:</b></p> <p>[6] SC1.1 recognizing sexual and asexual reproduction.</p> <p>[6] SC1.2 recognizing that species survive by adapting to changes in their environment.</p> <p><b>The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:</b></p> <p>[6] SC2.1 using a <u>dichotomous key to classify</u> animals and plants into groups using external or internal features.</p> <p>[6] SC2.2 identifying basic behaviors (e.g., migration, communication, hibernation) used by organisms to meet the requirements of life.</p> <p>[6] SC2.3 describing the levels of organization within a human body (i.e., cells, tissues,</p>	<p><b>Plants in Our World</b> Reader, pp. 6-8, 10, 12, 17, 19-20</p> <p><b>DNA- From Genes to Proteins</b> Reader, p. 18</p> <p><b>Oceans</b> Activity 10-11, pp. 113-134 Reader, pp. 12-13</p> <p><b>DNA- From Genes to Proteins</b> Reader, p. 20</p> <p><b>You and Your Body</b> Activity 1-2, 4, 6, pp. 13-25, 33-39, 49-54</p>

<p>organs, systems).</p> <p><b>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:</b></p> <p>[6] SC3.1 recognizing that organisms can cause physical and chemical changes (e.g., digestion, growth, respiration, photosynthesis) to matter and recognizing the importance of energy transfer in these changes.</p> <p>[6] SC3.2 organizing a food web using familiar plants and animals.</p>	<p>Reader, pp. 2-11  <b>Plants in Our World</b>  Activity 1-2, 4, pp. 13-33, 41-47  Reader, pp. 2, 5, 14-15, 19  <b>DNA- From Genes to Proteins</b>  Activity 3-4, pp. 25-39  Reader, pp. 2-5</p> <p><b>You and Your Body</b>  Activity 8, pp. 61-66  Reader, pp. 7-9  <b>Plants in Our World</b>  Activity 5-6, 8-11, pp. 49-62, 73-102  Reader, pp. 3-4  <b>DNA- From Genes to Proteins</b>  Reader, pp. 8-11</p>
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### D1 – Concepts of Earth Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of geochemical cycles by:</b></p> <p>[6] SD1.1 exploring the rock cycle and its relationship to igneous, metamorphic, and sedimentary rocks. (L)</p> <p>[6] SD1.2 identifying the physical properties of water within the stages of the water cycle</p> <p><b>The student demonstrates an understanding of the forces that shape Earth by:</b></p> <p>[6] SD2.1 describing the formation and composition (i.e., sand, silt, clay, organics) of soils.</p> <p>[6] SD2.2 identifying and describing its layers (i.e., crust, mantle, core).</p>	<p><b>Rocks and Minerals</b>  Activity 2, 9-10, pp. 21-28, 69-84  Reader, pp. 9-13  <b>Earth Processes</b>  Activity 4-6, pp. 39-62  Reader, pp. 16-18</p> <p><b>Oceans</b>  Activity 5, pp. 55-63  Reader, p. 10</p> <p><b>Erosion</b>  Reader, pp. 5-7  <b>Earth Processes</b>  Activity 3, pp. 29-37  Reader, pp. 19-20</p> <p><b>Rocks and Minerals</b>  Reader, p. 2  <b>Erosion</b>  Reader, pp. 2-3</p>

<p>[6] SD2.3 describing how the surface can change rapidly as a result of geological activities (i.e., earthquakes, tsunamis, volcanoes, floods, landslides, avalanches).</p> <p><b>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by:</b></p> <p>[6] SD3.1 connecting the water cycle to weather phenomena.</p> <p>[6] SD3.2 identifying that energy transfer is affected by surface conditions (e.g., snow cover, asphalt, vegetation) and that this affects weather.</p> <p><b>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:</b></p> <p>[6] SD4.1 contrasting characteristics of planets and stars (i.e., light reflecting, light emitting, orbiting, orbited, composition).</p> <p>[6] SD4.2 defining a light year.</p>	<p><b>Earth Processes</b> Activity 2, pp. 23-28 Reader, pp. 2-3</p> <p><b>Erosion</b> Activity 6, pp. 51-57 Reader, pp. 4, 11, 15</p> <p><b>Earth Processes</b> Activity 5, 8, 10, pp. 47-54, 71-79, 89-95 Reader, pp. 9-10</p> <p><b>Oceans</b> Activity 5, pp. 55-63 Reader, p. 10</p> <p><b>Weather Forecasting</b> Activity 9, pp. 69-74 Reader, p. 4</p> <p><b>Solar Energy</b> Investigation 2, Part 2, pp. 16-24 Investigation 3, Parts 1-2, pp. 8-23 Science Stories, pp. 16-17, 22-24</p> <p><b>Weather and Water</b> Investigation 4, Part 1, pp. 121-130 CD, Cycles: Water Cycle</p> <p><b>Earth, Moon and Sun</b> Activity 1, 3-4, pp. 13-19, 29-44 Reader, pp. 3-4, 21-23</p> <p><b>Astronomy</b> Activity 1, 6, pp. 13-22, 61-68 Reader, pp. 2-9</p> <p><b>Earth, Moon and Sun</b> Reader, p. 4</p> <p><b>Astronomy</b> Activity 8, pp. 77-83 Reader, p. 9</p>
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### E1 – Science and Technology

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:</b></p> <p>[6] SE1.1 recognizing that technology cannot</p>	<p>DSM provides the opportunity to address this</p>

<p>always provide successful solutions for problems or fulfill every human need.</p> <p><b>The student demonstrates an understanding that solving problems involves different ways of thinking, perspective, and curiosity by:</b></p> <p>[6] SE2.1 identifying and designing a solution to a problem.</p> <p>[6] SE 2.2 comparing the student's work to the work of peers in order to identify multiple paths that can be used to investigate a question or problem. (L)</p> <p><b>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:</b></p> <p>[6] SE3.1 describing the various effects of an innovation on a <u>global level</u>.</p>	<p>standard. See below:</p> <p><b>Pollution</b> Activity 6, Science, Technology and Society, p. 52 Activity 10, Science and Social Studies, 76 <b>DNA-From Genes to Proteins</b> Reader, p. 22</p> <p><b>Oceans</b> Activity 10, Science Challenge, p. 124 <b>Pollution</b> Activity 12, pp. 83-88 <b>Simple Machines</b> Activity 12, Science Challenge, p. 95 <b>Flight and Rocketry</b> Activity 5, pp. 55-64 Activity 5, Reinforcement, p. 63 Activity 10, pp. 99-109 <b>Newton's Toy Box</b> Activity 10, Science Challenge, p. 72</p> <p>DSM provides the opportunity to address this standard. See below.</p> <p><b>Oceans</b> Activity 10, Science Challenge, p. 124 <b>Pollution</b> Activity 12, pp. 83-88 <b>Simple Machines</b> Activity 12, Science Challenge, p. 95 <b>Flight and Rocketry</b> Activity 5, pp. 55-64 Activity 5, Reinforcement, p. 63 Activity 10, pp. 99-109 <b>Newton's Toy Box</b> Activity 10, Science Challenge, p. 72</p> <p><b>Pollution</b> Activity 10, Science and Social Studies, p. 76 Reader, pp. 6-7 <b>Electrical Connections</b> Reader, p. 22 <b>DNA-From Genes to Proteins</b> Reader, p. 22</p>
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## F1 – Cultural, Social, Personal Perspectives, and Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by:</b></p> <p>[6] SF1.1-SF3.1 telling a local or traditional story that explains a natural event (e.g., animal adaptation, weather, rapid changes to Earth’s surface) and relating it to a scientific explanation. (L) Cross referenced with SA3.1</p>	<p><b>Weather Forecasting</b>                      Activity 11, pp. 81-86                      Activity 11, Science and Language Arts, p. 86</p>

## G1 – History and Nature of Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by:</b></p> <p>[6] SG2.1 recognizing differences in results of repeated experiments.</p>	<p>DSM provides the opportunity to address this standard. See below:  <b>You and Your Body</b>                      Activity 3, 6, pp. 27-31, 49-54  <b>Flight and Rocketry</b>                      Activity 8-9, pp. 81-97  <b>Color and Light</b>                      Activity 2-5, pp. 19-52  <b>Newton’s Toy Box</b>                      Activity 7-8, pp. 49-59  <b>Electrical Connections</b>                      Activity 9-10, pp. 75-87  <b>Matter and Change</b>                      Activity 11-12, pp. 93-104</p>

# GRADE SEVEN

## A1 – Science as Inquiry and Process

PERFORMANCE STANDARD	DSM
<p><b>The student develops an understanding of the processes of science by:</b></p> <p>[7] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.</p> <p>[7] SA1.2 collaborating to design and conduct simple repeatable investigations, in order to record, analyze (i.e., range, mean, median, mode), interpret data, and present findings. (L)</p> <p><b>The student will demonstrate an understanding of attitudes and approaches to scientific inquiry by:</b></p> <p>[7] SA2.1 Identifying and <u>evaluating</u> the sources used to support scientific statements.</p> <p><b>The student demonstrates an understanding that interactions with the environment provides an opportunity for understanding scientific concepts by:</b></p> <p>[7] SA3.1 designing and conducting a simple investigation about the local environment. (L)</p>	<p>DSM uses an inquiry approach and develops science process skills in all investigations. See for example:</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Plants in Our World</b> Activity 1-4, pp. 13-47</p> <p><b>Earth Processes</b> Activity 3-7, pp. 29-69</p> <p><b>Newton’s Toy Box</b> Activity 7-10, pp. 49-72</p> <p><b>Earth, Moon and Sun</b> Activity 1-6, pp. 13-60</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Plants in Our World</b> Activity 3, pp. 35-40</p> <p><b>Matter and Change</b> Activity 1, 12, pp. 13-19, 99-104</p> <p><b>Newton’s Toy Box</b> Activity 7-9, pp. 49-65</p> <p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Plants in Our world</b> Activity 1, Science and Social Studies, p. 25</p> <p><b>Astronomy</b> Activity 9, Science, Technology and Society, p. 91</p> <p><b>Newton’s Toy Box</b> Activity 9, Science, Technology and Society, p. 65</p> <p><b>Earth Processes</b> Activity 3-4, pp. 29-46</p> <p><b>Plants in Our World</b> Activity 3, 5-6, 8-10, pp. 35-40, 49-62, 73-94</p>

## B1 – Concepts of Physical Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the structure and properties of matter by:</b></p> <p>[7] SB1.1 using physical properties (i.e., density, boiling point, freezing point, conductivity) to differentiate among and/or separate materials (i.e., elements, compounds, and mixtures).</p> <p><b>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:</b></p> <p>[7] SB2.1 <u>explaining</u> that energy (i.e., heat, light, chemical, electrical, mechanical) <u>can change</u> form.</p> <p><b>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:</b></p> <p>[7] SB3.1 recognizing that most substances can exist as a solid, liquid, or gas depending <u>on the motion of its particles</u>.</p> <p><b>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:</b></p> <p>[7] SB4.1 illustrating that unbalanced forces will cause an object to accelerate.</p> <p>[7] SB4.2 recognizing that electric currents and magnets can exert a force on each other.</p> <p>[7] SB4.3 describing the characteristics of a wave (i.e., amplitude, wavelength, and frequency).</p>	<p><b>Matter and Change</b> Activity 1, 3, 10, pp. 13-19, 29-35, 85-92</p> <p><b>Electrical Connections</b> Activity 2-3, pp. 21-34 Reader, pp. 7-8, 13-16</p> <p><b>Newton's Toy Box</b> Activity 8, 10, pp. 55-59, 67-72 Reader, p. 14</p> <p><b>Plants in Our World</b> Reader, pp. 3-4</p> <p><b>Matter and Energy</b> Activity 1-3, pp. 13-35 Reader, pp. 9-12</p> <p><b>Newton's Toy Box</b> Activity 3, 9, pp. 25-31, 61-65 Reader, pp. 5, 8, 12</p> <p><b>Electrical Connections</b> Activity 4, 11, pp. 35-42, 89-94 Reader, pp. 11-14</p>

## C1 – Concepts of Life Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:</b></p> <p>[7] SC1.1 comparing and contrasting sexual and asexual reproduction.</p> <p>[7] SC1.2 describing possible outcomes of mutations (i.e., no effect, damage, benefit).</p> <p><b>The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:</b></p> <p>[7] SC2.1 describing the basic structure and function of plant and animal cells.</p> <p>[7] SC2.2 identifying <u>the seven levels of classification</u> of organisms.</p> <p>[7] SC2.3 identifying and describing the functions of human organs (i.e., heart, lungs, brain).</p> <p><b>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:</b></p> <p>[7] SC3.1 recognizing <u>and explaining</u> that organisms can cause physical and chemical changes (e.g., digestion, growth, respiration, photosynthesis) to matter and recognizing and explaining the importance of energy transfer in these changes.</p> <p>[7] SC3.2 classifying organisms within a food web as producers, consumers, or decomposers.</p>	<p><b>Plants in Our World</b> Reader, pp. 6-8, 10, 12, 17, 19-20 <b>DNA-From Genes to Proteins</b> Reader, p. 18</p> <p><b>DNA-From Genes to Proteins</b> Activity 10, pp 87-94</p> <p><b>Plants in Our World</b> Activity 1, pp. 13-26 Reader, p. 2 <b>DNA-From Genes to Proteins</b> Activity 3-4, pp. 25-39 Reader, pp. 2-14</p> <p><b>Plants in Our World</b> Reader, p. 23</p> <p><b>Plants in Our World</b> Activity 5-6, 8-11, pp. 49-62, 73-102 Reader, pp. 3-4 <b>DNA-From Genes to Proteins</b> Reader, pp. 8-11</p>

## D1 – Concepts of Earth Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of geochemical cycles by:</b></p> <p>[7] SD1.1 <u>describing</u> the rock cycle and its relationship to igneous, metamorphic, and sedimentary rocks.</p> <p>[7] SD1.2 explaining the water cycle's connection to changes in the Earth's surface.</p> <p><b>The student demonstrates an understanding of the forces that shape Earth by:</b></p> <p>[7] SD2.1 identifying strategies (e.g., reforestation, dikes, wind breaks, off road activity guidelines) for minimizing erosion.</p> <p>[7] SD2.2 describing how the movement of tectonic plates results in both slow changes (e.g., formation of mountains, ocean floors, and basins) and short-term events (e.g., volcanic eruptions, seismic waves, and earthquakes) on the surface.</p> <p><b>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth's position and motion in our solar system by:</b></p> <p>[7] SD3.1 describing the weather using accepted meteorological terms (e.g., pressure systems, fronts, precipitation).</p> <p>[7] SD3.2 recognizing the relationship between phase changes (i.e., sublimation, condensation, evaporation) and energy transfer.</p> <p><b>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:</b></p> <p>[7] SD4.1 <u>comparing</u> and contrasting characteristics of planets and stars (i.e., light reflecting, light emitting, orbiting, orbited, composition).</p> <p>[7] SD4.2 using light-years to describe distances between objects in the universe.</p>	<p><b>Earth Processes</b> Activity 4-6, pp. 39-62 Reader, pp. 16-18</p> <p><b>Earth Processes</b> Reader, p. 20</p> <p><b>Earth Processes</b> Activity 7-14, pp. 63-129 Reader, pp. 4-10</p> <p>This standard is addressed in the grade six module <u>Weather Forecasting</u>.</p> <p><b>Matter and Change</b> Reader, pp. 11-12</p> <p><b>Earth, Moon and Sun</b> Activity 1, 3-4, pp. 13-19, 29-44 Reader, pp. 3-4, 21-33 <b>Astronomy</b> Activity 1, 6, pp. 13-22, 61-68 Reader, pp. 2-9</p> <p><b>Earth, Moon and Sun</b> Reader, p. 4 <b>Astronomy</b></p>

	Activity 8, pp. 77-83 Reader, pp. 9, 14
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## E1 – Science and Technology

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:</b></p> <p>[7] SE1.1 describing how public policy affects the student’s life. (e.g., public waste disposal) (L)</p> <p><b>The student demonstrates an understanding that solving problems involves different ways of thinking, perspective, and curiosity by:</b></p> <p>[7] SE2.1 identifying, designing, <u>testing and revising solutions</u> to a <u>local</u> problem. (L)</p> <p>[7] SE 2.2 comparing the student’s work to the work of peers in order to identify multiple paths that can be used to investigate a question or problem. (L)</p> <p><b>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:</b></p> <p>[7] SE3.1 recognizing the effects of a past scientific discovery, invention, or scientific breakthrough (e.g., DDT, internal combustion engine).</p>	<p><b>DNA-From Genes to Proteins</b> Activity 13, Science and Social Studies, p. 115</p> <p><b>Newton’s Toy Box</b> Activity 4, Science Extension, p. 38 Activity 8, Science Challenge, p. 59 Activity 10, Science Challenge, p. 72</p> <p><b>Electrical Connections</b> Activity 3, Science Challenge, p. 33 Activity 12, Science Challenge, p. 99</p> <p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Newton’s Toy Box</b> Activity 4, Science Extension, p. 38 Activity 8, Science Challenge, p. 59 Activity 10, Science Challenge, p. 72</p> <p><b>Electrical Connections</b> Activity 3, Science Challenge, p. 33 Activity 12, Science Challenge, p. 99</p> <p><b>Electrical Connections</b> Activity 10, Science, Technology and Society, p. 87 Reader, p. 22</p> <p><b>DNA-From Genes to Proteins</b> Reader, pp. 20, 22</p> <p><b>Astronomy</b> Reader, pp. 22-23</p> <p><b>Matter and Change</b> Activity 8, Science, Technology and Society, p. 75 Reader, p. 22</p> <p><b>Newton’s Toy Box</b> Activity 10, Science and Social Studies, p. 72</p>

## F1 – Cultural, Social, Personal Perspectives, and Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by:</b></p> <p>[7] SF1.1-SF3.1 investigating the basis of local knowledge (e.g., describing and predicting weather) and sharing that information. (L) Cross referenced with SA3.1</p>	

## G1 – History and Nature of Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by:</b></p> <p>[7] SG2.1 <u>explaining</u> differences in results of repeated experiments.</p>	<p>DSM provides the opportunity to address this standard. See below:  <b>Newton’s Toy Box</b>            Activity 7-8, pp. 49-59  <b>Electrical Connections</b>            Activity 9-10, pp. 75-87  <b>Matter and Change</b>            Activity 11-12, pp. 93-104  <b>Plants in Our World</b>            Activity 3, pp. 35-40</p>
<p><b>The student demonstrates an understanding that scientific knowledge is ongoing and subject to change by:</b></p> <p>[7] SG3.1 revising a personal idea when presented with experimental/observational data inconsistent with that personal idea (e.g., the rates of falling bodies of different masses). (L)</p>	<p>DSM provides the opportunity to address this standard. See below:  <b>Newton’s Toy Box</b>            Activity 3, 7-8, pp. 23-31, 49-59  <b>Electrical Connections</b>            Activity 9-10, pp. 75-87  <b>Matter and Change</b>            Activity 11-12, pp. 93-104  <b>Plants in Our World</b>            Activity 3, pp. 35-40</p>

# GRADE EIGHT

## A1 – Science as Inquiry and Process

PERFORMANCE STANDARD	DSM
<p><b>The student develops an understanding of the processes of science by:</b></p> <p>[8] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.</p> <p>[8] SA1.2 collaborating to design and conduct repeatable investigations, in order to record, analyze (i.e., range, mean, median, mode), interpret data, and present findings. (L)</p> <p><b>The student will demonstrate an understanding of attitudes and approaches to scientific inquiry by:</b></p> <p>[8] SA2.1 recognizing and analyzing differing scientific explanations and models.</p> <p><b>The student demonstrates an understanding that interactions with the environment provides an opportunity for understanding scientific concepts by:</b></p> <p>[8] SA3.1 conducting research to learn how the local environment is used by a variety of competing interests (e.g., competition for habitat/resources, tourism, oil and mining companies, hunting groups). (L)</p>	<p>DSM uses an inquiry approach and develops science process skills in all investigations. See for example:</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Plants in Our World</b> Activity 1-4, pp. 13-47</p> <p><b>Earth Processes</b> Activity 3-7, pp. 29-69</p> <p><b>Newton’s Toy Box</b> Activity 7-10, pp. 49-72</p> <p><b>Earth, Moon and Sun</b> Activity 1-6, pp. 13-60</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Plants in Our World</b> Activity 3, pp. 35-40</p> <p><b>Matter and Change</b> Activity 1, 12, pp. 13-19, 99-104</p> <p><b>Newton’s Toy Box</b> Activity 7-9, pp. 49-65</p> <p>DSM provides the opportunity to address this standard. See below:</p> <p><b>Electrical Connections</b> Activity 9-10, pp. 75-87</p> <p><b>Plants in Our World</b> Activity 3, pp. 35-40</p> <p><b>Matter and Change</b> Activity 1, 12, pp. 13-19, 99-104</p> <p><b>Newton’s Toy Box</b> Activity 7-9, pp. 49-65</p>

## B1 – Concepts of Physical Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the structure and properties of matter by:</b></p> <p>[8] SB1.1 using physical and <u>chemical</u> properties (i.e., density, boiling point, freezing point, conductivity, flammability) to differentiate among materials (i.e., elements, compounds, and mixtures).</p>	<p><b>Matter and Change</b> Activity 1, 3, 10, pp. 13-19, 29-35, 85-92</p>
<p><b>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:</b></p> <p>[8] SB2.1 identifying the initial source and resulting change in forms of energy in common phenomena (e.g., sun to tree to wood to stove to cabin heat).</p>	<p><b>Electrical Connections</b> Activity 2-3, pp. 21-34 Reader, pp. 7-8, 13-16</p> <p><b>Newton’s Toy Box</b> Activity 8, 10, pp. 55-59, 67-72 Reader, p. 14</p> <p><b>DNA-From Genes to Proteins</b> Reader, pp. 10-11</p> <p><b>Plants in Our World</b> Reader, pp. 3-4</p>
<p><b>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:</b></p> <p>[8] SB3.1 exploring changes of state with increase or decrease of particle speed associated with heat transfer. (L)</p> <p>[8] SB3.2 exploring through a variety of models (e.g., gumdrops and toothpicks) how atoms may bond together into well defined molecules or bond together in large arrays. (L)</p>	<p><b>Matter and Change</b> Reader, pp. 9-12</p> <p><b>Matter and Change</b> Activity 4-7, pp. 37-68</p>
<p><b>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:</b></p> <p>[8] SB4.1 demonstrating (L) and explaining circular motion.</p> <p>[8] SB4.2 describing the interactions between charges.</p>	<p><b>Newton’s Toy Box</b> Reader, p. 23</p> <p><b>Electrical Connections</b> Activity 1, pp. 13-20 Reader, pp. 2-6</p>

## C1 – Concepts of Life Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:</b></p> <p>[8] SC1.1 describing the role of genes in sexual reproduction (i.e., traits of the offspring).</p> <p><b>The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:</b></p> <p>[8] SC2.1 placing vertebrates into correct classes of taxonomy based on external, observable features.</p> <p>[8] SC2.2 explaining that most organisms utilize inherited and learned behaviors to meet the basic requirements of life.</p> <p>[8] SC2.3 describing the functions and interdependence of human body systems (i.e., circulatory, respiratory, nervous).</p> <p><b>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:</b></p> <p>[8] SC3.1 stating that energy flows and that matter cycles but is conserved within an ecosystem.</p> <p>[8] SC3.2 organizing a food web that shows the cycling of matter.</p>	<p><b>DNA-From Genes to Proteins</b> Reader, pp. 15-19</p>

## D1 – Concepts of Earth Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of geochemical cycles by:</b></p> <p>[8] SD1.1 making connections between components of the locally observable geologic environment and the rock cycle. (L)</p> <p>[8] SD1.2 applying knowledge of the water</p>	<p>DSM provides the opportunity to address this standard. See below: <b>Earth Processes</b> Activity 3-4, 6, pp. 29-46, 55-62 Reader, pp. 16-20</p> <p>DSM provides the opportunity to address this</p>

<p>cycle to explain changes in the Earth's surface.</p> <p><b>The student demonstrates an understanding of the forces that shape Earth by:</b></p> <p>[8] SD2.1 interpreting topographical maps to identify features (i.e., rivers, lakes, mountains, valleys, islands, and tundra).</p> <p>[8] SD2.2 using models to show the relationship between convection currents within the mantle and the large-scale movement of the surface.</p> <p><b>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth's position and motion in our solar system by:</b></p> <p>[8] SD3.1 recognizing the relationship between the seasons and Earth's tilt relative to the sun and describing the day/night cycle as caused by the rotation of the Earth every 24 hrs.</p> <p>[8] SD3.2 recognizing types of energy transfer (convection, conduction, and radiation) and how they affect weather.</p> <p><b>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:</b></p> <p>[8] SD4.1 creating models of the solar system illustrating size, location/position, composition, moon/rings, and conditions. (L)</p> <p>[8] SD4.2 comparing the brightness of a star to its distance and size.</p>	<p>standard. See below:  <b>Earth Processes</b>  Reader, pp. 11-13</p> <p><b>Earth Processes</b>  Activity 12-13, pp. 105-120  Reader, pp. 6-8</p> <p><b>Earth, Moon and Sun</b>  Activity 6, 8-9, pp. 53-60, 71-92  Reader, pp. 8-12  <b>Astronomy</b>  Activity 5, pp. 51-60</p> <p><b>Earth, Moon and Sun</b>  Activity 3-4, pp. 29-44  <b>Astronomy</b>  Activity 6, pp. 61-68</p> <p><b>Astronomy</b>  Activity 8, pp. 77-83  Reader, pp. 8-10</p>
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### E1 – Science and Technology

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:</b></p> <p>[8] SE1.1 describing how public policy affects their live and participating diplomatically in evidence-based discussions relating to their community. (L)</p>	<p>DSM provides the opportunity to address this standard. See below:  <b>DNA-From Genes to Proteins</b>  Activity 13, Science and Social Studies, p. 115</p>

<p><b>The student demonstrates an understanding that solving problems involves different ways of thinking, perspective, and curiosity by:</b></p> <p>[8] SE2.1 identifying, designing, testing and revising solutions to a local problem. (L)</p> <p>[8] SE 2.2 comparing the student’s work to the work of peers in order to identify multiple paths that can be used to investigate <u>and evaluate potential solutions</u> to a question or problem. (L)</p> <p><b>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:</b></p> <p>[8] SE3.1 <u>predicting the possible effects of a recent</u> scientific discovery, invention, or scientific breakthrough. (L)</p>	<p><b>Newton’s Toy Box</b>  Activity 4, Science Extension, p. 38  Activity 8, Science Challenge, p. 59  Activity 10, Science Challenge, p. 72  <b>Electrical Connections</b>  Activity 3, Science Challenge, p. 33  Activity 12, Science Challenge, p. 99</p> <p>DSM provides the opportunity to address this standard. See below:  <b>Newton’s Toy Box</b>  Activity 4, Science Extension, p. 38  Activity 8, Science Challenge, p. 59  Activity 10, Science Challenge, p. 72  <b>Electrical Connections</b>  Activity 3, Science Challenge, p. 33  Activity 12, Science Challenge, p. 99</p> <p>DSM provides the opportunity to address this standard. See below:  <b>DNA-From Genes to Proteins</b>  Activity 12, Science, Technology and Society, p. 108  Activity 13, Science, Technology and Society, p. 115  Reader, P. 22  <b>Electrical Connections</b>  Reader, p. 22</p>
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### F1 – Cultural, Social, Personal Perspectives, and Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by:</b></p> <p>[8] SF1.1-SF3.1 describing how local knowledge, culture, and the technologies of various activities (e.g., hunting, fishing, subsistence) influence the development of scientific knowledge. (L) Cross referenced with SA3.1, grade 8</p>	

## G1 – History and Nature of Science

PERFORMANCE STANDARD	DSM
<p><b>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by:</b></p> <p>[8] SG2.1 describing how repeating experiments improves the likelihood of accurate results.</p>	<p>DSM provides the opportunity to address this standard. See below:  <b>Newton’s Toy Box</b>            Activity 7-8, pp. 49-59  <b>Electrical Connections</b>            Activity 9-10, pp. 75-87  <b>Matter and Change</b>            Activity 11-12, pp. 93-104  <b>Plants in Our World</b>            Activity 3, pp. 35-40</p>
<p><b>The student demonstrates an understanding that scientific knowledge is ongoing and subject to change by:</b></p> <p>[8] SG3.1 revising a personal idea when presented with experimental/observational data inconsistent with that personal idea (e.g., the rates of falling bodies of different masses). (L)</p>	<p>DSM provides the opportunity to address this standard. See below:  <b>Newton’s Toy Box</b>            Activity 3, 7-8, pp. 23-31, 49-59  <b>Electrical Connections</b>            Activity 9-10, pp. 75-87  <b>Matter and Change</b>            Activity 11-12, pp. 93-104  <b>Plants in Our World</b>            Activity 3, pp. 35-40</p>