



Delta Science Modules III Program K-7

Correlation

to

Kansas Science Education Standards



Kansas

Science Education Standards

Correlation

to

Delta Science Module III Program

This correlation shows representative examples of investigations and activities from the DSM III program that address the Science Content Standards. A citation does not reflect all of the investigations or activities that might address a particular standard.

September 2007

STANDARD 1: SCIENCE AS INQUIRY GRADES K-2

SCIENCE AS INQUIRY – The student will experience science as *full inquiry*. In the elementary grades, students begin to develop the physical and intellectual abilities of scientific inquiry.

Benchmark 1: The student will be involved in activities that develop skills necessary to conduct scientific inquiries.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. identifies <i>properties</i> of objects. 2. <i>classifies</i> and arranges groups of objects by a variety of properties, one property at a time. 3. uses appropriate materials, <i>tools</i>, and safety procedures to collect information. 4. asks and answers questions about objects, organisms, and events in 	<p>Properties Activity 1-12, pp. 13-93</p> <p>How Do We Learn Activity 2-3, pp. 23-35</p> <p>Investigating Water Activity 1-2, 5, pp. 13-26, 41-46</p> <p>Soil Science Activity 1-4, pp. 15-44</p> <p>States of Matter Activity 1-3, pp. 13-34</p> <p>Properties Activity 2-7, 10-12, pp. 25-60, 75-93</p> <p>How Do We Learn Activity 2-3, pp. 23-35</p> <p>Finding the Moon Activity 9, pp. 77-84</p> <p>Classroom Plants Activity 2, p. 23-28</p> <p>Soil Science Activity 2, pp. 21-27</p> <p>Sink or Float Activity 1, pp. 13-19</p> <p>DSM activities have students use materials and tools in a safe manner to collect information. See for example:</p> <p>Sunshine and Shadows Activity 8-11, pp. 65-88</p> <p>How Do We Learn Activity 5-10, pp. 43-86</p> <p>Investigating Water Activity 2-8, pp. 21-69</p> <p>Using Your Senses Activity 2, 6-11, pp. 23-30, 53-95</p> <p>Weather Watching Activity 2-7, pp. 21-68</p> <p>States of Matter Activity 6-11, pp. 51-96</p> <p>DSM provides opportunity for students to ask and answer questions throughout the program.</p>

his/her environment.	See for example: Observing an Aquarium Activity 8-11, pp. 79-116 Finding the Moon Activity 6-10, pp. 55-91 Properties Activity 10-12, pp. 75-93 Butterflies and Moths Activity 3-10, pp. 31-95 Soil Science Activity 5-12, pp. 45-114 Plant and Animal Populations Activity 3-9, pp. 35-93
5. describes an observation orally or pictorially.	Observing an Aquarium Activity 3-6, pp. 31-67 From Seed to Plant Activity 3-6, pp. 33-58 Investigating Water Activity 2-5, pp. 21-46 Force and Motion Activity 1-7, pp. 13-72 Classroom Plants Activity 2-11, pp. 23-104 Soil Science Activity 1-4, pp. 15-44

STANDARD 2: PHYSICAL SCIENCE GRADES K-2

PHYSICAL SCIENCE - The student will explore the world by observing and manipulating common objects and materials in their environment.

Benchmark 1: The student will develop skills to describe objects.

INDICATOR	DSM
The student...	
1. observes <i>properties</i> of objects and measures or describes those <i>properties</i> using age-appropriate tools and materials.	Properties Activity 6-7, 10-11, pp. 47-60, 75-86 How Do We Learn Activity 10, pp. 81-86 Investigating Water Activity 5, 7-8, pp. 41-46, 55-69 Soil Science Activity 1-4, pp. 15-44 States of Matter Activity 7, 11, pp. 57-63, 89-96
2. separates or sorts a group of objects or materials by <i>properties</i> .	Properties Activity 2-6, 10-12, pp. 25-60, 75-93 How Do We Learn Activity 2-3, pp. 23-35 Investigating Water Activity 5, 7, pp. 41-46, 55-61 Soil Science

<p>3. compares the properties of solids and liquids.</p> <p>4. describes the position of an object in relation to other objects.</p>	<p>Activity 2, pp. 21-27 Sink or Float Activity 1, pp. 13-19 Classroom Plants Activity 2, pp. 23-28</p> <p>Properties Activity 7-8, pp. 53-66 Reader, pp. 5-11 Investigating Water Activity 1, 9, pp. 13-20, 71-80 States of Matter Activity 1-2, pp. 13-25 Reader, pp. 4-5 Sink or Float Reader, pp. 5-6</p> <p>Properties Activity 10-11, pp. 75-86 How Do We Learn Activity 6-8, pp. 51-71 Sunshine and Shadows Activity 3-6, pp. 27-56 Force and Motion Activity 1-5, 7-9, pp. 13-55, 65-90 Sink or Float Activity 1-3, pp. 13-34 Soil Science Activity 2-3, pp. 21-36</p>
--	--

STANDARD 3: LIFE SCIENCE GRADES K-2

LIFE SCIENCE – The student will begin to develop an understanding of biological concepts.

Benchmark 1: The student will develop an understanding of the characteristics of living things.

INDICATOR	DSM
<p>The student...</p> <p>1. discusses that <i>organisms</i> live only in <i>environments</i> in which their needs can be met.</p>	<p>Observing an Aquarium Activity 1-2, pp. 15-30 Reader, pp. 9, 12 From Seed to Plant Activity 8, 14, pp. 67-72, 105-109 Reader, p. 12 Butterflies and Moths Activity 1, 4, 10, pp. 15-21, 39-45, 89-95 Reader, p. 2 Plant and Animal Populations Activity 4-7, pp. 43-76 Reader, pp. 4-7 Classroom Plants</p>

<p>2. observes <i>life cycles</i> of different living things.</p>	<p>Activity 3-5, pp. 29-53 Reader, pp. 2-3</p> <p>Observing an Aquarium Activity 10, pp. 97-107 Reader, pp. 10-11</p> <p>From Seed to Plant Activity 13, pp. 97-103 Reader, pp. 10-11</p> <p>Butterflies and Moths Activity 1, 6, 9, 11, pp. 15-21, 53-59, 79-87, 97-104 Reader, pp. 3, 8-13</p> <p>Classroom Plants Reader, p. 5</p>
<p>3. observes living things in various <i>environments</i>.</p>	<p>Observing an Aquarium Activity 12, pp. 117-123 Reader, pp. 14-15</p> <p>Butterflies and Moths Activity 4, pp. 39-45</p> <p>Plant and Animal Populations Activity 3-7, pp. 35-76 Reader, pp. 2-9</p> <p>Classroom Plants Activity 12, pp. 105-112</p>
<p>4. examines the <i>structures/parts</i> of living things.</p>	<p>Observing an Aquarium Activity 3-6, pp. 31-67 Reader, pp. 6-9</p> <p>From Seed to Plant Activity 3-5, 9-10, 12, pp. 33-52, 73-84, 91-96 Reader, pp. 3-9</p> <p>Butterflies and Moths Activity 2, 5, 12, pp. 25-30, 47-52, 105-110 Reader, pp. 4-7</p> <p>Using Your Senses Activity 1, 5, 8-11, pp. 13-21, 45-52, 67-95 Reader, pp. 4-12</p> <p>Classroom Plants Activity 6-9, pp. 55-86 Reader, pp. 6-12</p> <p>Plant and Animal Populations Activity 4-7, pp. 43-76</p>

STANDARD 4: EARTH AND SPACE SCIENCE GRADES K-2

EARTH AND SPACE SCIENCE – The student will observe closely the objects and materials in their *environment*.

Benchmark 1: The student will describe *properties of earth materials*.

INDICATOR	DSM
The student...	
1. observes, compares, and sorts <i>earth materials</i> .	Soil Science Activity 1-4, 7-8, pp. 15-37, 59-79 Reader, pp. 2-8

STANDARD 4: EARTH AND SPACE SCIENCE GRADES K-2

EARTH AND SPACE SCIENCE – The student will observe closely the objects and materials in their environment.

Benchmark 2: The student will observe and compare objects in the sky.

INDICATOR	DSM
The student...	
1. observes and recognizes the sun, moon, stars, clouds, birds, airplanes, and other objects in the sky.	Finding the Moon Activity 1, pp. 13-19 Reader, pp. 2-10 Sunshine and Shadows Reader, pp. 2, 10
2. describes that the sun provides light and warmth	Sunshine and Shadows Activity 1, pp. 13-18 Reader, p. 2 Weather Watching Activity 3, pp. 29-36 Reader, p. 4

STANDARD 4: EARTH AND SPACE SCIENCE GRADES K-2

EARTH AND SPACE SCIENCE – The student will observe closely the objects and materials in their environment.

Benchmark 3: The student will describe changes in weather.

INDICATOR	DSM
The student...	
1. observes changes in the weather from day to day.	Weather Watching Activity 1-7, pp. 13-68
2. records weather changes daily.	Weather Watching Activity 1-7, pp. 13-68

**STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES
GRADES K-2**

SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will have a variety of experiences that provide understanding for various science-related personal and environmental challenges.

Benchmark 1: The student will demonstrate responsibility for their own health.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> engages in personal care. discusses healthy foods discuss the basic human need for safety and how to practice safety at home and school. 	<p>DSM has a “safety” section in each teacher guide for the teacher to reference. Activities also indicate safety concerns where appropriate. See for example: Sunshine and Shadows, p. 5 Sink or Float, p. 43 States of Matter, p. 59</p>

**STANDARD 7: HISTORY AND NATURE OF SCIENCE
GRADES K-2**

HISTORY AND NATURE OF SCIENCE – The student will experience scientific inquiry and learn about people from history.

Benchmark 1: The student will know they practice science.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> is involved in explorations that make his/her mind wonders and know that he/she is practicing science. uses <i>technology</i> to learn about people in science. 	<p>DSM is an inquiry-based program that engages students in the scientific process. See for example: Investigating Water Activity 7-8, pp. 55-69 Properties Activity 10-11, pp. 75-86 Observing an Aquarium Activity 8-9, pp. 79-95 Plant and Animal Populations Activity 8-11, pp. 77-110 Force and Motion Activity 4-5, pp. 41-55 Classroom Plants Activity 5, pp. 47-53</p> <p>The use of technology is encouraged in the DSM program. See also:</p>

	<p>Finding the Moon Reader, p. 14</p> <p>Observing an Aquarium Reader, p. 13</p> <p>Properties Reader, p. 14</p> <p>Using Your Senses Reader, pp. 13-14</p> <p>Weather Watching Reader, pp. 13-14</p> <p>Butterflies and Moths Reader, p. 14</p>
--	--

STANDARD 1: SCIENCE AS INQUIRY GRADES 3-4

SCIENCE AS INQUIRY – The student will experience science as inquiry.

Benchmark 1: The student will develop the skills necessary to do full inquiry. *Full inquiry* involves asking a simple question, completing an *investigation*, answering the question, and sharing the results with others.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. asks questions that he/she can answer by investigating. 2. plans and conducts a simple investigation. 3. employs appropriate equipment, <i>tools</i>, and safety procedures to gather data. 4. begins developing the abilities to communicate, critique, analyze his/her own investigations, and interpret the work of other students. 	<p>DSM activities encourage investigative questions. See for example:</p> <p>Soil Science Activity 7-8, pp. 59-79</p> <p>Weather Watching Activity 3, pp. 29-36</p> <p>States of Matter Activity 4-5, pp. 35-50</p> <p>Magnets Activity 2-4, pp. 19-34</p> <p>Sound Activity 9-11, pp. 73-98</p> <p>Food Chains and Webs Activity 2-3, 8, pp. 23-37, 67-72</p> <p>Classroom Plants Activity 5, pp. 47-53</p> <p>Force and Motion Activity 4-5, pp. 41-55</p> <p>Plant and Animal Populations Activity 9-11, pp. 85-110</p> <p>Sound Activity 9-11, pp. 73-98</p> <p>Electrical Circuits Activity 6-7, pp. 51-62</p> <p>Water Cycle Activity 5, pp. 45-51</p> <p>Weather Watching Activity 2-5, 7, pp. 21-50, 61-68</p> <p>Using Your Senses Activity 2, 8, pp. 23-30, 67-73</p> <p>Weather Instruments Activity 1-5, 11, pp. 13-50, 89-96</p> <p>Magnets Activity 9-11, pp. 59-76</p> <p>Dinosaurs and Fossils Activity 6-7, pp. 47-60</p> <p>DSM activities encourage these inquiry skills. See for example:</p> <p>Classroom Plants Activity 5, pp. 47-53</p>

	<p>Soil Science Activity 7-8, 10-12, pp. 59-79, 91-114</p> <p>Sink or Float Activity 9-11, pp. 75-96</p> <p>Weather Instruments Activity 6-7, pp. 51-66</p> <p>Water Cycle Activity 2-5, pp. 23-51</p> <p>Food Chains and Webs Activity 2-3, 8, pp. 23-37, 67-72</p>
--	---

STANDARD 2: PHYSICAL SCIENCE GRADES 3-4

PHYSICAL SCIENCE - The student will increase their understanding of the *properties* of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and *classify* these materials by observable properties.

Benchmark 1: The student will develop skills to describe objects.

INDICATOR	DSM
The student...	
1. observes <i>properties</i> of objects and measures those <i>properties</i> using appropriate <i>tools</i> .	<p>Weather Watching Activity 2, pp. 21-28</p> <p>States of Matter Activity 7, 11, pp. 57-63, 89-96</p> <p>Magnets Activity 4, pp. 29-34</p> <p>Weather Instruments Activity 1, pp. 13-21</p>
2. describes and <i>classifies</i> objects by more than one property.	<p>Soil Science Activity 2, pp. 21-27</p> <p>States of Matter Activity 1-3, pp. 13-34</p> <p>Classroom Plants Activity 2, pp. 23-28</p> <p>Magnets Activity 2, pp. 19-23</p> <p>Dinosaurs and Fossils Activity 9-10, pp. 67-82</p>
3. observes and records how one object <i>interacts</i> with another object.	<p>Force and Motion Activity 4-8, pp. 41-82</p> <p>Soil Science Activity 5-6, pp. 45-58</p> <p>Sink or Float Activity 4, pp. 35-42</p> <p>Magnets Activity 1-4, pp. 13-34</p> <p>Electrical Circuits Activity 1-7, pp. 13-62</p> <p>Sound</p>

<p>4. recognizes and describes the differences between solids, liquids, and gases.</p>	<p>Activity 2-3, pp. 21-35</p> <p>States of Matter Activity 1-3, pp. 13-34 Reader, pp. 5-6</p> <p>Sink or Float Reader, pp. 5-6</p>
--	---

STANDARD 2: PHYSICAL SCIENCE GRADES 3-4

PHYSICAL SCIENCE – The student will increase their understanding of the properties of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and classify these materials by observable properties.

Benchmark 2: The student will describe the motion of objects.

INDICATOR	DSM
<p>The student...</p> <p>1. moves objects by pushing, pulling, throwing, spinning, dropping, and rolling and describes the motion.</p> <p>2. describes the change in position of objects when moved.</p>	<p>Force and Motion Activity 1-10, pp. 13-99</p> <p>Soil Science Activity 5, pp. 45-49</p> <p>Sound Activity 2, 6, pp. 21-28, 51-57</p> <p>Earth Movements Activity 8-9, pp. 71-85</p> <p>Solar System Activity 2, 9, pp. 21-26, 73-81</p> <p>Force and Motion Activity 1-10, pp. 13-99</p> <p>Sink or Float Activity 1, pp. 13-19</p> <p>Weather Watching Activity 4, pp. 37-44,</p> <p>Weather Instruments Activity 1, 3-4, pp. 13-21, 31-42</p> <p>Solar System Activity 8-9, pp. 65-81</p>

STANDARD 2: PHYSICAL SCIENCE GRADES 3-4

PHYSICAL SCIENCE – The student will increase their understanding of the properties of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and classify these materials by observable properties.

Benchmark 3: The student will recognize and demonstrate what makes sounds.

INDICATOR	DSM
The student...	
1. identifies that the source of sound is vibrations.	Using Your Senses Activity 5, pp. 45-52 Reader, p. 7 Sound Activity 2-3, pp. 21-35 Reader, pp. 1-2
2. discriminates between sounds made by different objects.	Using Your Senses Activity 6, pp. 53-60 Reader, p. 7 Sound Activity 8-11, pp. 67-98
3. discriminates between various pitches.	Using Your Senses Activity 7, pp. 61-66 Sound Activity 1, pp. 13-20

STANDARD 2: PHYSICAL SCIENCE GRADES 3-4

PHYSICAL SCIENCE – The student will increase their understanding of the properties of objects and materials that they encounter on a daily basis. The student will compare, describe, and sort and classify these materials by observable properties.

Benchmark 4: The student will experiment with electricity and magnetism-

INDICATOR	DSM
The student...	
1. demonstrates that magnets attract and repel.	Magnets Activity 6, pp. 41-45 Reader, p. 5
2. designs a simple experiment to determine whether various objects will be attracted to magnets.	Magnets Activity 2, pp. 19-23
3. constructs a <i>simple, circuit</i> .	Electrical Circuits Activity 1-4, pp. 13-43

STANDARD 3: LIFE SCIENCE GRADES 3-4

LIFE SCIENCE – The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 1: The student will develop knowledge of organisms in their environment.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. observes different organisms and compares and contrasts how similar functions are served by different structural characteristics. 2. compares basic needs of different organisms in their environment. 3. discusses ways organisms use their senses to survive in their environments. 	<p>Butterflies and Moths Activity 1-2, 5, 9-10, pp. 15-30, 47-52, 79-95 Reader, pp. 4-7</p> <p>Plant and Animal Populations Activity 4-7, pp. 43-76 Reader, pp. 4-7</p> <p>Classroom Plants Activity 6-11, pp. 55-104 Reader, pp. 6-12</p> <p>Food Chains and Webs Activity 4-6, pp. 39-58 Reader, pp. 4-5</p> <p>Plant and Animal Life Cycles Reader, pp. 3-6, 15</p> <p>Dinosaurs and Fossils Activity 8, pp. 61-66 Reader, pp. 6-11</p> <p>Butterflies and Moths Activity 1, pp. 15-21</p> <p>Plant and Animal Populations Activity 4, pp. 43-50 Reader, p. 6</p> <p>Classroom Plants Activity 3-5, pp. 29-53</p> <p>Food Chains and Webs Activity 3-7, 11-12, pp. 33-66, 89-101 Reader, pp. 4-9</p> <p>Plant and Animal Life Cycles Activity 2-3, pp. 23-41</p> <p>Butterflies and Moths Activity 10, pp. 89-95</p> <p>Plant and Animal Populations Activity 4-6, pp. 43-67</p> <p>Using Your Senses Activity 1-3, 5, 8-12, pp. 13-36, 45-52, 67-103 Reader, pp. 2-12</p> <p>Food Chains and Webs Activity 4-5, pp. 39-52 Reader, p. 4</p> <p>Plant and Animal Life Cycles Activity 4, pp. 43-48</p>

STANDARD 3: LIFE SCIENCE GRADES 3-4

LIFE SCIENCE – The student will develop an understanding of biological concepts through direct experience with living things, their life cycles, and their habitats.

Benchmark 2: The student will observe and illustrate the life cycles of various organisms.

INDICATOR	DSM
<p>The student...</p> <p>1. compares, contrasts, and asks questions about life cycles of various organisms.</p>	<p>Butterflies and Moths Activity 1, 6, 9, 11, pp. 15-21, 53-59, 79-87, 97-104 Reader, pp. 3, 8-13</p> <p>Plant and Animal Populations Activity 5, pp. 51-57</p> <p>Plant and Animal Life Cycles Activity 2-6, 9-11, pp. 23-63, 83-103 Reader, pp. 2-13</p>

STANDARD 4: EARTH AND SPACE SCIENCE GRADES 3-4

EARTH AND SPACE SCIENCE – The student will observe objects, materials, and changes in their *environment*, note their *properties*, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 1: The student will develop an understanding of the properties of *earth materials*.

INDICATOR	DSM
<p>The student...</p> <p>1. collects, observes <i>properties</i>, and <i>classifies</i> a variety of <i>earth materials</i> in his/her <i>environment</i>.</p> <p>2. experiments with a variety of soil types (clay, silt, sand, and loam).</p> <p>3. describes <i>properties</i> of water and process of the water cycle.</p> <p>4. observes and records the properties of</p>	<p>Soil Science Activity 1-4, 7, pp. 15-44, 59-67</p> <p>Water Cycle Activity 1, pp. 13-21 Reader, pp. 2-7</p> <p>Earth Movements Activity 3, pp. 29-36</p> <p>Soil Science Activity 8, 10, pp. 69-79, 91-97</p> <p>Weather Watching Reader, pp. 4-5</p> <p>Water Cycle Activity 1-6, 8-13, pp. 13-60, 69-114 Reader, pp. 4-11</p> <p>Weather Instruments Reader, p. 6</p> <p>Dinosaurs and Fossils</p>

<i>fossils</i> and discusses what <i>fossils</i> are.	Activity 2-3, pp. 21-34 Reader, pp. 4-5, 13-15 Earth Movements Activity 3, pp. 29-37
---	--

STANDARD 4: EARTH AND SPACE SCIENCE GRADES 3-4

EARTH AND SPACE SCIENCE – The student will observe objects, materials, and changes in their environment, note their *properties*, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 2: The student will observe and describe objects in the sky.

INDICATOR	DSM
The student...	
1. observes the moon and stars.	Solar System Activity 12, pp. 101-110 Reader, p. 7 This indicator is also addressed in the grade 1 module <u>Finding the Moon</u> .
2. observes and compares the length of shadows.	This indicator is addressed in the grade 1 module <u>Sunshine and Shadows</u> .
3. discusses that the sun provides light and heat (electro-magnetic radiation) to maintain the temperature of the earth.	Solar System Activity 1, pp. 13-20 Reader, pp. 2-3 Water Cycle Activity 11, 13, pp. 91-98, 107-114 Reader, pp. 10-11

STANDARD 4: EARTH AND SPACE SCIENCE GRADES 3-4

EARTH AND SPACE SCIENCE – The student will observe objects, materials, and changes in their environment, note their properties, distinguish one from another, and develop their own explanations making sense of their observations.

Benchmark 3: The student will develop skills necessary to describe changes in the earth and weather.

INDICATOR	DSM
The student...	
1. describes changes in the surface of the earth.	Soil Science Activity 12, pp. 107-114 Reader, pp. 8-9 Earth Movements Reader, pp. 12-13
2. observes, describes, and records daily and seasonal weather changes.	Weather Watching Activity 1-7, pp. 13-68 Weather Instruments

STANDARD 5: SCIENCE AND TECHNOLOGY GRADES 3-4

SCIENCE AND TECHNOLOGY – The student will have a variety of educational experiences which involve science and technology. The student will begin to understand the design process.

Benchmark 1: The student will work with a technology design.

INDICATOR	DSM
<p>The student...</p> <p>1. identifies a simple <i>design problem</i> (designs a plan, implements the plan, evaluates the results, makes changes to improve the product, and communicates the results).</p>	<p>States of Matter Activity 5, pp. 41-50</p> <p>Force and Motion Activity 12, Science Challenge, p. 117</p> <p>Sink or Float Activity 12, pp. 97-107</p> <p>Sound Activity 12, pp. 99-105</p>

STANDARD 5: SCIENCE AND TECHNOLOGY GRADES 3-4

SCIENCE AND TECHNOLOGY – The student will have a variety of educational experiences which involve science and technology. They will begin to understand the design process.

Benchmark 2: The student will apply their understanding about science and technology.

INDICATOR	DSM
<p>The student...</p> <p>1. will understand that the design process produces knowledge that can be used to solve a problem and improve our world.</p> <p>2. invents a product to solve problems.</p>	<p>DSM provides the opportunity to teach this indicator. See for example:</p> <p>Classroom Plants Reader, p. 14</p> <p>States of Matter Reader, p. 13</p> <p>Force and Motion Reader, pp. 12-14</p> <p>Sink or Float Activity 9-10, 12, pp. 75-88, 97-107</p> <p>Sound Activity 12, pp. 99-105</p> <p>Electrical Circuits Reader, pp. 10-14</p> <p>States of Matter Activity 5, pp. 41-50</p> <p>Sink or Float Activity 12, pp. 97-107</p> <p>Sound</p>

<p>3. works with others to solve problems.</p>	<p>Activity 12, pp. 99-105</p> <p>DSM activities involve students working together. See for example:</p> <p>Soil Science Activity 10, pp. 91-97</p> <p>Using Your Senses Activity 9, pp. 75-80</p> <p>Plant and Animal Populations Activity 9, pp. 85-93</p> <p>Food Chains and Webs Activity 2-3, pp. 23-37</p> <p>Water Cycle Activity 12, pp. 99-106</p> <p>Solar System Activity 8, pp. 65-72</p>
<p>4. develops an awareness that women and men of all ages, backgrounds, and ethnic groups engage in a variety of scientific and technological work.</p>	<p>Butterflies and Moths Reader, p. 14</p> <p>Classroom Plants Reader, p. 14</p> <p>Weather Watching Reader, p. 13</p> <p>Dinosaurs and Fossils Reader, pp. 14-15</p> <p>Plant and Animal Life Cycles Reader, p. 14</p> <p>Solar System Reader, p. 14</p>
<p>5. investigates how scientists use <i>tools</i> to observe.</p>	<p>DSM provides the opportunity to teach this indicator. See for example:</p> <p>States of Matter Activity 6-7, pp. 51-63</p> <p>Weather Watching Activity 2-7, pp. 21-68 Reader, p. 14</p> <p>Using Your Senses Activity 2, pp. 23-30</p> <p>Weather Instruments Activity 1-5, pp. 13-50 Reader, pp. 3-5, 7-9</p> <p>Solar System Activity 5-8, pp. 43-72 Reader, p. 15</p> <p>Dinosaurs and Fossils Activity 6-7, pp. 47-60</p> <p>Earth Movements Reader, p. 14</p>

**STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES
GRADES 3-4**

SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will demonstrate personal health and environmental practices.

Benchmark 1: The student will develop an understanding of personal health.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. discusses the nutritional value of various foods and their contribution to health. 2. discusses that safety involves preventing injury by avoiding inappropriate risks and dangers. 3. assumes some responsibility for his/her own health, and the health and well being of others. 	<p>DSM teacher's guides provide a "Safety" section for teacher reference and provide safety warnings within the activities when appropriate. See for example: Force and Motion, p. 25 Electrical Circuits, pp. 30, 64, 87 Water Cycle, p. 79</p>

**STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES
GRADES 3-4**

SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will demonstrate personal health and environmental practices.

Benchmark 2: The student will demonstrate an awareness of changes in the environment.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. defines pollution. 2. develops personal actions to solve pollution problems in and around the neighborhood. 3. practices reducing, reusing, and recycling. 	<p>Soil Science Activity 11, pp. 99-115 Water Cycle Activity 11, Science and Health, p. 98</p> <p>Soil Science Activity 12, Science, Technology, and Society, p. 115</p> <p>Water Cycle Activity 11, Science and Math, p. 98</p>

SCIENCE AS INQUIRY GRADES 5-7

SCIENCE AS INQUIRY – The student will develop the abilities to do *scientific inquiry*, be able to demonstrate how *scientific inquiry* is applied, and develop understandings about *scientific inquiry*.

Benchmark 1: The student will demonstrate abilities necessary to do the processes of *scientific inquiry*.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. identifies questions that can be answered through scientific investigations. 2. designs and conducts <i>scientific investigations</i> safely using appropriate tools, mathematics, <i>technology</i>, and techniques to gather, analyze, and interpret data. 3. identifies the relationship between evidence and logical conclusions. 	<p>DSM activities are inquiry-based and students identify questions to be investigated. See for example:</p> <p>Color and Light Activity 7, pp. 61-67</p> <p>Pollution Activity 10, pp. 71-76</p> <p>Erosion Activity 5-6, pp. 43-57</p> <p>Matter and Change Activity 12-13, pp. 99-109</p> <p>Newton’s Toy Box Activity 2-9, pp. 49-55</p> <p>Earth Processes Activity 11-12, pp. 97-110</p> <p>Electromagnetism Activity 6, pp. 43-48</p> <p>Simple Machines Activity 3-4, pp. 35-37</p> <p>Flight and Rocketry Activity 8-9, pp. 81-97</p> <p>Matter and Change Activity 1-3, pp. 13-35</p> <p>Newton’s Toy Box Activity 7-9, pp. 49-65</p> <p>Plants in Our World Activity 3, pp. 35-40</p> <p>You and Your Body Activity 3, 5, pp. 27-31, 41-48</p> <p>Simple Machines Activity 2-4, pp. 19-37</p> <p>Oceans Activity 2-3, pp. 23-41</p> <p>Matter and Change Activity 1-3, p. 13-35</p> <p>Electrical Connections Activity 9-10, pp. 75-87</p> <p>Earth Processes Activity 11-12, pp. 97-110</p>

<p>4. communicates scientific procedures, results and explanations.</p>	<p>Students communicate both written and orally in their investigations. See for example:</p> <p>Electromagnetism Activity 5-6, pp. 37-48</p> <p>You and Your Body Activity 3, pp. 27-31</p> <p>Pollution Activity 9-10, pp. 65-76</p> <p>Matter and Change Activity 12-13, pp. 99-109</p> <p>Earth, Moon and Sun Activity 5, pp. 45-51</p> <p>Newton's Toy Box Activity 8-9, pp. 55-65</p>
---	---

STANDARD 1: SCIENCE AS INQUIRY GRADES 5-7

SCIENCE AS INQUIRY – The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 2: The student will apply different kinds of investigations to different kinds of questions.

INDICATOR	DSM
<p>The student....</p> <p>1. develops questions and adapts (frames) the inquiry process to guide the appropriate type of investigation.</p> <p>2. differentiates between qualitative and quantitative data in an investigation.</p>	<p>DSM activities provide the opportunity to teach this indicator. See for example:</p> <p>You and Your Body Activity 5, pp. 41-48</p> <p>Electromagnetism Activity 6, pp. 43-48</p> <p>Pollution Activity 10, pp. 71-76</p> <p>Plants in Our World Activity 3, pp. 35-40</p> <p>Matter and Change Activity 12, pp. 99-104</p> <p>Electrical Connections Activity 9-10. pp. 75-87</p> <p>DSM activities provide the opportunity to teach this indicator. See for example:</p> <p>Oceans Activity 2-3, pp. 23-41</p> <p>Rocks and Minerals Activity 3-6, pp. 29-54</p> <p>Simple Machines Activity 2-4, pp. 19-37</p> <p>Newton's Toy Box Activity 7-9, pp. 49-65</p> <p>Matter and Change Activities 1-3, pp. 13-35</p>

STANDARD 1: SCIENCE AS INQUIRY
GRADES 5-7

SCIENCE AS INQUIRY – The student will develop the abilities to do scientific inquiry, be able to demonstrate how scientific inquiry is applied, and develop understandings about scientific inquiry.

Benchmark 3: The student will analyze how science advances through the interaction of new ideas, scientific investigations, skepticism, and examinations of evidence of varied explanations.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> after completing an investigation, generates alternative methods of investigation and/or further questions for inquiry. evaluates the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by data. 	<p>DSM activities provide the opportunity to teach this indicator. See for example:</p> <p>Pollution Activity 10, pp. 71-76</p> <p>Erosion Activity 10-12, pp. 83-104</p> <p>You and Your Body Activity 3, pp. 27-31</p> <p>Matter and Change Activity 12-13, pp. 99-109</p> <p>Plants in Our World Activity 3, pp. 35-40</p> <p>Electrical Connections Activity 9-10, pp. 75-87</p> <p>DSM activities provide the opportunity to teach this indicator. See for example:</p> <p>Simple Machines Activity 3-4, pp. 25-37</p> <p>Electromagnetism Activity 6, pp. 43-48</p> <p>You and Your Body Activity 5, pp. 41-48</p> <p>Matter and Change Activity 1-3, pp. 13-35</p> <p>Newton's Toy Box Activity 7-9, pp. 49-65</p> <p>Plants in Our World Activity 3, pp. 35-40</p>

STANDARD 2: PHYSICAL SCIENCE GRADES 5-7

PHYSICAL SCIENCE – The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 1: The student will observe, compare, and classify properties of matter.

INDICATOR	DSM
The student...	
1. compares and classifies the states of matter; solids, liquids, gases, and plasma.	Matter and Change Reader, p. 10
2. compares and contrasts the classes of matter, elements, compounds, and mixtures.	Matter and Change Activity 3-7, pp. 29-68 Reader, pp. 4-8, 14-15
3. identifies and communicates properties of matter including but not limited to, boiling point, solubility, and density.	Oceans Activity 3, pp. 31-41 Rocks and Minerals Activity 3-6, pp. 29-54 Reader, pp. 4-6 Matter and Change Activity 1, 3, pp. 13-19, 29-35 Reader, pp. 11-14

STANDARD 2: PHYSICAL SCIENCE GRADES 5-7

PHYSICAL SCIENCE – The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 2: The student will observe, measure, infer, and classify changes in properties of matter.

INDICATOR	DSM
The student...	
1. understands the relationship of atoms to elements and elements to compounds.	Matter and Change Activity 4-7, pp. 37-68 Reader, pp. 2-8
2. measures and graphs the effects of temperature on matter.	Matter and Change Reader, pp. 11-12

STANDARD 2: PHYSICAL SCIENCE GRADES 5-7

PHYSICAL SCIENCE – The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 3: The student will investigate motion and forces.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. identifies the forces that act on an object (e.g. gravity and friction). 2. describes, measures, and represents data on a graph showing the motion of an object (position, direction of motion, speed). 3. recognizes and describes examples of Newton's Laws of Motion. 4. investigates and explains how simple machines multiply force at the expense of distance. 	<p>Flight and Rocketry Activity 2, 4, 6-9, 11-12, pp. 23-32. 45-54, 63-97, 111-130 Reader, pp. 3-7, 10-13</p> <p>Simple Machines Activity 1-12, pp. 13-95 Reader, pp. 2-9</p> <p>Electromagnetism Activity 1, pp. 13-17</p> <p>Newton's Toy Box Activity 1-13, pp. 13-90 Reader, pp. 4-13</p> <p>Newton's Toy Box Activity 7-9, pp. 49-65 Reader, pp. 1-7</p> <p>Newton's Toy Box Activity 1, 3,7-13, pp. 13-17, 25-31, 49-90 Reader, pp. 10-13</p> <p>Simple Machines Activity 2, 5, 7-12, pp. 19-24, 39-47, 57-95 Reader, pp. 4-9</p> <p>Newton's Toy Box Reader, pp. 15-21</p>

STANDARD 2: PHYSICAL SCIENCE GRADES 5-7

PHYSICAL SCIENCE – The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.

Benchmark 4: The student will understand and demonstrate the transfer of energy.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. understands the difference between potential and kinetic energy. 	<p>Simple Machines Reader, p. 3</p> <p>Newton's Toy Box</p>

<p>2. understands that when work is done energy transforms from one form to another, including mechanical, heat, light, sound, electrical, chemical, and nuclear energy, yet is conserved.</p> <p>3. observes and communicates how light (electromagnetic) energy interacts with matter: transmitted, reflected, refracted, and absorbed.</p> <p>4. understands that heat energy can be transferred from hot to cold by radiation, convection, and conduction.</p>	<p>Activity 10, pp. 67-72 Reader, p. 14</p> <p>Simple Machines Activity 5-7, pp. 39-63 Reader, pp. 3-10</p> <p>Flight and Rocketry Activity 9, 12, pp. 91-97, 121-130 Reader, pp. 10-13</p> <p>Electromagnetism Activity 6-10, pp. 43-76 Reader, pp. 1-5, 8-13</p> <p>Electrical Connections Activity 2-3, 11, pp. 21-34, 89-94 Reader, pp. 7, 13-16</p> <p>Color and Light Activity 1, 4-7, pp. 13-18, 32-67 Reader, pp. 2-7</p> <p>Oceans Activity 5, 8, pp. 55-63, 89-98</p> <p>Weather Forecasting Activity 9, pp. 69-74 Reader, p.4</p> <p>Earth Processes Activity 12, pp. 105-110 Activity 12, Science Challenge, p. 110 Reader, p. 3</p>
--	--

STANDARD 3: LIFE SCIENCE GRADES 5-7

LIFE SCIENCE – The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 1: The student will model structures of organisms and relate functions to the structures.

INDICATOR	DSM
<p>The student...</p> <p>1. will understand the cell theory; that organisms are composed of one or more cells; cells are the basic unit of life, and that cells come from other cells.</p> <p>2. relates the structure of cells, organs, tissues, organ systems, and whole organisms to their functions.</p>	<p>You and Your Body Reader, p. 2</p> <p>Plants in Our World Activity 1, pp. 13-26</p> <p>DNA-From Genes to Protein Activity 3-4, pp. 25-39 Reader, pp. 2-14</p> <p>You and Your Body Reader, pp. 2-11</p> <p>Plants in Our World</p>

<p>3. compares organisms composed of single cells with organisms that are multi-cellular.</p> <p>4. concludes that breakdowns in structure or function may be caused by disease, damage, heredity, or aging.</p>	<p>Activity 1-2, 4, pp. 13-33, 41-47 Reader, pp. 3-5, 7-8, 13-15, 18-20 DNA-From Genes to Protein Activity 3-4, pp. 25-39 Reader, pp. 2-14</p> <p>DNA-From Genes to Protein Activity 11, pp. 95-100 Reader, pp. 5-7, 14 Plants in Our World Reader, pp. 2-20</p> <p>DNA-From Genes to Protein Activity 10, pp. 87-94</p>
--	--

STANDARD 3: LIFE SCIENCE GRADES 5-7

LIFE SCIENCE – The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 2: The student will understand the role of reproduction and heredity for all living things.

INDICATOR	DSM
<p>The student...</p> <p>1. differentiates between asexual and sexual reproduction of organisms.</p> <p>2. understands how hereditary information of each cell is passed from one generation to the next.</p> <p>3. infers that the characteristics of an organism result from heredity and interactions with the environment.</p>	<p>DNA-From Genes to Protein Reader, pp. 12-14 Plants in Our World Reader, pp. 6-8, 10,12, 17-19</p> <p>DNA-From Genes to Proteins Activity 3, Science Extension, p. 29 Activity 5, Science Extension, p. 49 Reader, pp. 12-19</p> <p>DNA-From Genes to Proteins Reader, pp. 15-20</p>

STANDARD 3: LIFE SCIENCE GRADES 5-7

LIFE SCIENCE – The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 3: The student will describe homeostasis, the regulation and balance of internal conditions in response to a changing external environment.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. understands that internal and/or environmental conditions affect an organism's behavior and/or response in order to maintain and regulate stable internal conditions to survive in a continually changing environment. 	<p>Plants in Our World Activity 4-6, pp. 41-62 Reader, pp. 3-6</p>

STANDARD 3: LIFE SCIENCE GRADES 5-7

LIFE SCIENCE – The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 4: The student will identify and relate interactions of populations of organisms within an ecosystem.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. recognizes that all populations living together (biotic resources) and the physical factors (abiotic resources) with which they interact compose an ecosystem. 2. understands how limiting factors determine the carrying capacity of an ecosystem. 3. traces the energy flow from the sun (source of radiant energy) to producers (via photosynthesis-chemical energy) to consumers and decomposers in food webs 	<p>Plants in Our World Reader, p. 2 DNA-From Genes to Proteins Reader, p. 10</p>

STANDARD 3: LIFE SCIENCE GRADES 5-7

LIFE SCIENCE – The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Benchmark 5: The student will observe the diversity of living things and relate their adaptations to their survival or extinction.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. concludes that species of animals, plants, and microorganisms may look dissimilar on the outside but have similarities in internal structures, developmental characteristics, chemical processes, and genomes. 2. understands that adaptations of organisms (changes in structure, function, or behavior that accumulate over successive generations) contribute to biological diversity. 3. associates extinction of a species with environmental changes and insufficient adaptive characteristics. 	<p>You and Your Body Activity 1-2, 4, 6-8, pp. 13-25, 33-39, 49-66 Reader, pp. 2-11</p> <p>Plants in Our World Activity 1-2, 4-6, 8-11, pp. 13-33, 41-47, 73-102 Reader, pp. 3-20</p> <p>DNA-From Genes to Proteins Reader, p. 19</p>

STANDARD 4: EARTH and SPACE SCIENCE GRADES 5-7

EARTH and SPACE SCIENCE – The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth’s history, and earth in the solar system.

Benchmark 1: The student will understand that the structure of the earth system is continuously changing due to earth's physical and chemical processes.

INDICATOR	DSM
<p>The student...</p> <ol style="list-style-type: none"> 1. identifies properties of the solid earth, the oceans and fresh water, and the atmosphere. 	<p>Rocks and Minerals Activity 1, 3-6, 9-10, pp. 13-19, 29-54, 69-84 Reader, pp. 4-12</p> <p>Oceans Activity 3, pp. 31-41 Reader, p. 3</p> <p>Weather Forecasting Activity 3, 5, pp. 25-32, 41-48</p> <p>Flight and Rocketry Activity 1, p. 13-21</p> <p>Earth Processes</p>

<p>2. models earth's cycles, constructive and destructive processes, and weather systems.</p>	<p>Activity 4-6, pp. 39-62 Reader, pp. 16-19</p> <p>Rocks and Minerals Activity 2, 9-10, pp. 21-28, 69-84 Reader, pp. 9-13</p> <p>Oceans Activity 5, pp. 55-63</p> <p>Erosion Activity 1-2, 9-12, pp. 13-27, 75-104 Reader, pp. 2-13</p> <p>Earth Processes Activity 3, 5-8, 12-14, pp. 29-37, 47-79, 105-129 Reader, pp. 4-20</p> <p>Earth, Moon and Sun Activity 8-12, pp. 71-119 Reader, pp. 8-19</p>
---	---

STANDARD 4: EARTH and SPACE SCIENCE GRADES 5-7

EARTH and SPACE SCIENCE – The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 2: The student will understand past and present earth processes and their similarity.

INDICATOR	DSM
<p>The student...</p> <p>1. understands that earth processes observed today (including movement of lithospheric plates, constructive and destructive forces, and changes in atmospheric conditions) are similar to those that occurred in the past; earth history is also influenced by occasional catastrophes, such as the impact of a comet or asteroid.</p>	<p>Erosion Activity 1-2, 9-12, pp. 13-27, 75-104 Reader, pp. 2-13</p> <p>Earth Processes Activity 1, 3-8, 10-14, pp. 13-21, 29-79, 89-129 Reader, pp. 4-20</p>

STANDARD 4: EARTH and SPACE SCIENCE GRADES 5-7

EARTH and SPACE SCIENCE – The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth's history, and earth in the solar system.

Benchmark 3: The student will identify and classify stars, planets, and other solar system components.

INDICATOR	DSM
<p>The student...</p> <p>1. compares and contrasts the</p>	<p>Earth, Moon and Sun</p>

<p>characteristics of stars, planets, moons, comets, and asteroids.</p> <p>2. models spatial relationships of the earth/moon/planets/sun system to scale.</p> <p>3. identifies past and present methods used to explore space</p>	<p>Activity 2-5, pp. 21-51 Reader, pp. 2-4, 6-7, 21-23 Astronomy Activity 6, 10, pp. 61-68, 93-100 Reader, pp. 2-12</p> <p>Earth, Moon and Sun Activity 3-5, 8-12 pp. 29-51, 71-119 Astronomy Activity 5-6, pp. 51-68</p> <p>Astronomy Activity 9, pp. 85-91 Activity 9, Science, Technology and Society, p. 91 Reader, pp. 16-20</p>
---	---

STANDARD 4: EARTH and SPACE SCIENCE GRADES 5-7

EARTH and SPACE SCIENCE – The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth’s history, and earth in the solar system.

Benchmark 4: The student will model motions and identify forces that explain earth phenomena.

INDICATOR	DSM
<p>The student...</p> <p>1. demonstrates and models object/space/time relationships that explain phenomena such as the day, the month, the year, seasons, phases of the moon, eclipses and tides.</p> <p>2. describes how of the angle of incidence of solar energy striking earth’s surface affects the amount of heat energy absorbed at earth’s surface.</p>	<p>Oceans Activity 9, pp. 99-111 Reader, p. 9 Earth, Moon and Sun Activity 8-12, pp. 71-119 Reader, pp. 8-19 Astronomy Activity 5, pp. 51-60</p> <p>Earth, Moon and Sun Activity 8, pp. 71-79 Reader, p. 11</p>

STANDARD 5: SCIENCE AND TECHNOLOGY GRADES 5-7

SCIENCE AND TECHNOLOGY – The student will demonstrate abilities of technological design and understanding about science and technology.

Benchmark 1: The student will demonstrate abilities of technological design.

INDICATOR	DSM
The student...	

<p>1. identifies appropriate problems for technological design, designs a solution or product, implements the proposed design, evaluates the product, and communicates the process of technological design.</p>	<p>Simple Machines Activity 12, Science Challenge, p. 95 Flight and Rocketry Activity 5, Reinforcement, p. 63 Oceans Activity 10, Science Challenge, p. 124 Newton's Toy Box Activity 10, Science Challenge, p. 72</p>
---	--

STANDARD 5: SCIENCE AND TECHNOLOGY GRADES 5-7

SCIENCE AND TECHNOLOGY – The student will demonstrate abilities of technological design and understanding about science and technology.

Benchmark 2: The student will develop understandings of the similarities, differences, and relationships in science and technology.

INDICATOR	DSM
<p>The student...</p> <p>1. compares the work of various types of scientists and engineers.</p> <p>2. evaluates benefits, risks, limitations and trade-offs of technological solutions.</p> <p>3. identifies contributions to science and</p>	<p>DSM activities provide the opportunity to teach this indicator. See for example: Flight and Rocketry Activity 12, Science and Social Studies, p. 130 Reader, pp. 5-15 Simple Machines Activity 8, Science, Technology, and Society, p. 69 Color and Light Reader, p. 14 Earth Processes Reader, p. 21 Matter and Change Reader, pp. 21-22 Astronomy Reader, pp. 16-21</p> <p>DSM activities provide the opportunity to teach this indicator. See for example: You and Your Body Reader, p. 12 Pollution Reader, pp. 14-15 Oceans Reader, pp. 14-15 Electromagnetism Activity 11, Science, Technology and Society, p. 83 Newton's Toy Box Activity 11, Science, Technology, and Society, p. 77</p> <p>You and Your Body</p>

technology by many people and many cultures.	Reader, pp. 12-13 Oceans Reader, p. 14 Color and Light Reader, p. 14 Simple Machines Reader, pp. 12-13 Matter and Change Reader, pp. 21-22 Earth Processes Reader p. 21 Newton's Toy Box Activity 1, Science and Social Studies, p. 17 Reader, p. 22
--	---

**STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES
GRADES 5-7**

SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 1: The student will understand scientific knowledge relative to personal health.

INDICATOR	DSM
The student... 1. identifies individual nutrition, exercise, and rest needs based on science and uses a scientific approach to thinking critically about personal health, lifestyle choices, risks and benefits.	You and Your Body Activity 12, pp. 85-89 Activity 12, Science, Technology, and Society, p. 89

**STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES
GRADES 5-7**

SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 2: The student will understand the impact of human activity on resources and environment.

INDICATOR	DSM
The student... 1. investigates the effects of human activities on the environment and bases decisions on knowledge of benefits and risks.	Pollution Activity 1-2, 6, 12, pp. 13-24, 47-52, 83-88 Activity 5, Science and Social Studies, p. 45 Activity 10, Science and Social Studies, p. 76

	Reader, pp. 2-15 Erosion Activity 10, Science and Social Studies, p. 89 Reader, p. 14
--	---

STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES GRADES 5-7

SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.

Benchmark 3: The student will understand that natural hazards are dynamic examples of earth processes which cause us to evaluate risks.

INDICATOR	DSM
The student...	
1. recognizes patterns of natural processes and/or human activities that may cause and/or contribute to natural hazards.	Weather Forecasting Activity 12, pp. 87-93 Erosion Activity 6, pp. 51-57 Activity 11, Science and Social Studies, p. 97 Earth Processes Activity 8, pp. 71-79 Reader, pp. 8-10
2. evaluates the risks involved with a natural hazard and identify appropriate actions in response to a natural hazard.	Weather Forecasting Activity 12, pp. 87-93 Activity 12, Science, Technology, and Society, p. 93 Activity 12, Science and Health, p. 93 Erosion Activity 10, Science, Technology, and Society, p. 89 Earth Processes Activity 8, Science and Health, p. 79 Activity 8, Science and Social Studies, p. 79 Activity 8, Science, Technology, and Society, p. 79 Reader, p. 20

STANDARD 7: HISTORY AND NATURE OF SCIENCE GRADES 5-7

HISTORY AND NATURE OF SCIENCE – The student will examine and develop an understanding of science as a historical human endeavor.

Benchmark 1: The student will develop scientific habits of mind.

INDICATOR	DSM
The student...	

1. practices intellectual honesty, demonstrates skepticism appropriately, displays open-mindedness to new ideas, and bases decisions on evidence.	DSM activities are inquiry-based and provide the opportunity to teach this indicator.
---	---

STANDARD 7: HISTORY AND NATURE OF SCIENCE GRADES 5-7

HISTORY AND NATURE OF SCIENCE – The student will examine and develop an understanding of science as a historical human endeavor.

Benchmark 2: The student will research contributions to science throughout history.

INDICATOR	DSM
<p>The student...</p> <p>1. recognizes that new knowledge leads to new questions and new discoveries, replicates historic experiments to understand principles of science, and relates contributions of men and women to the fields of science.</p>	<p>DSM activities are inquiry-based and provide the opportunity to teach this indicator. See also:</p> <p>You and Your Body Reader, pp. 12-13</p> <p>Oceans Reader, p. 14</p> <p>Color and Light Reader, p. 14</p> <p>Simple Machines Reader, pp. 12-13</p> <p>Matter and Change Reader, pp. 21-22</p> <p>Earth Processes Reader p. 21</p> <p>Newton’s Toy Box Activity 1, Science and Social Studies, p. 17 Reader, p. 22</p> <p>Astronomy Reader, pp. 16-23</p>