



DELTA SCIENCE MODULES

Grades K-8

CORRELATION
WITH

NEVADA

Academic Science
Standards



State of Nevada Academic Science Standards

Correlated with DSM™ (Delta Science Modules)

The following is a correlation of the Nevada Academic Science Standards to the Delta Science Modules. This correlation shows representative examples of investigations and activities from the DSM program that address the Benchmarks. A citation does not include all of the investigations or activities from DSM that might address a particular standard.

The correlation is organized by grade bands K-2, 3-5, and 6-8 in 4 science content areas: Nature of Science, Earth and Space Science, Physical Science, and Life Science.

NOTE: This correlation contains references to the DSM Middle School Courses for grades 6-8. Of the courses, Earth, Moon, and Sun, Earth Processes, Famous Scientists, If Shipwrecks Could Talk, Matter and Change, and Newton's Toy Box, are completed and included fully in the correlation. The other Middle School Courses, Astronomy, DNA – From Genes to Proteins, Electrical Connections, and Plants in Our World, are in the final stage of development and included where a correlation is anticipated.

GRADES K-2

Strand: Nature of Science

Unifying Concept A: Scientific Inquiry

Scientific inquiry is the process by which humans systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and test explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.2.A Students understand that science is an active process of systematically examining the natural world.	DSM Activities	Page Number(s)
N.2.A.1 Students know how to make observations and give descriptions using words, numbers, and drawings. E/S	Finding the Moon Activity 3, 5, 6 From Seed to Plant Activity 2, 3, 4 How Do We Learn? Activity 1, 2, 3, 5 Investigating Water Activity 1 Observing An Aquarium Activity 4, 5, 6, 8 Properties Activity 1, 2, 3, 4, 5, 12, 13 Sunshine and Shadows Activity 1, 9 Amazing Air Activity 2, 3, 4 Butterflies and Moths Activity 1, 2, 9 Classroom Plants Activity 2 Force and Motion Activity 3, 4 Length and Capacity Activity 1, 2, 3, 4 Plant and Animal Populations Activity 2 Sink or Float? Activity 2, 3 Soil Science Activity 1, 7 States of Matter Activity 3, 4 Using Your Senses Activity 3, 4, 5, 6 Weather Watching Activity 1, 7	Pages 29-38, 47-62 Pages 21-44 Pages 13-36, 43-50 Pages 13-20 Pages 39-68, 79-88 Pages 13-46, 87-100 Pages 13-18, 71-76 Pages 15-42 Pages 15-30, 79-88 Pages 23-28 Pages 31-47 Pages 7-36 Pages 25-34 Pages 21-34 Pages 15-20, 59-68 Pages 27-40 Pages 31-60 Pages 13-20, 61-68
N.2.A.2 Students know tools can be used safely to gather data and extend the senses. I/L	Finding the Moon Activity 2, 3 <i>Finding the Moon Reader</i> From Seed to Plant Activity 1, 2, 3, 4, 5, 6 How Do We Learn? Activity 5, 9	Pages 21-38 Page 6 Pages 15-58 Pages 43-50, 73-80

	<p><i>How Do We Learn? Reader</i> Investigating Water Activity 2, 8, 9 Observing An Aquarium Activity 3, 4 <i>Observing An Aquarium Reader</i> Properties Activity 6 <i>Properties Reader</i> Sunshine and Shadows Activity 9, 10, 11 Amazing Air Activity 1, 2, 3, 4, 5, 6 Butterflies and Moths Activity 1, 2, 9 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 1, 2, 3 Force and Motion Activity 1 <i>Force and Motion Reader</i> Length and Capacity Activity 4, 5, 6 Plant and Animal Populations Activity 1, 2, 3, 4, 5, 6, 7 Sink or Float? Activity 5, 9, 10, 11, 12 Soil Science Activity 1, 2, 3, 4, 5, 6 States of Matter Activity 6, 7, 11 <i>States of Matter Reader</i> Using Your Senses Activity 1, 4 Weather Watching Activity 2, 3, 4, 5 <i>Weather Watching Reader</i></p>	<p><i>Pages 8-9, 12-13</i> Pages 21-26, 63-80 Pages 31-46 <i>Page 13</i> Pages 47-52 <i>Page 6</i> Pages 71-88 Pages 7-57 Pages 15-30, 79-88 <i>Page 9</i> Pages 15-38 Pages 13-22 <i>Pages 2</i> Pages 27-48 Pages 15-76 Pages 43-52, 75-104 Pages 15-58 Pages 51-64, 89-96 <i>Page 2</i> Pages 13-22, 37-44 Pages 21-50 <i>Pages 6-7, 14-15</i></p>
<p>N.2.A.3 Students know observable patterns can be used to predict future events or sort items. E/S</p>	<p>Finding the Moon Activity 4, 9 From Seed to Plant Activity 1 How Do We Learn? Activity 2, 3 Investigating Water Activity 5 Properties Activity 1-7, 10-13 Sunshine and Shadows Activity 4, 6, 7 Amazing Air Activity 12 Butterflies and Moths Activity 3 Classroom Plants Activity 2 Force and Motion Activity 12 Length and Capacity Activity 7</p>	<p>Pages 39-46, 77-84 Pages 15-20 Pages 23-36 Pages 41-46 Pages 13-60, 75-100 Pages 33-42, 49-64 Pages 101-108 Pages 31-38 Pages 23-28 Pages 111-118 Pages 49-57</p>

	Plant and Animal Populations Activity 1, 3	Pages 15-24, 35-42
	Sink or Float? Activity 2, 3, 5	Pages 21-34, 43-52
	Soil Science Activity 1, 2, 3, 4	Pages 15-44
	States of Matter Activity 7, 10	Pages 57-64, 81-88
	Using Your Senses Activity 6	Pages 53-60
	Weather Watching Activity 3	Pages 29-36

Unifying Concept B: Science, Technology, and Society

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society influences the development of technology and its impact on culture.

N.2.A Students understand that many people contribute to the field of science.	DSM Activities	Page Number(s)
N.2.B.1 Students know science engages men and women of all ages and backgrounds. E/S	<p><i>Science and Social Studies and Science and Careers are features found in the "Connections" section that follows every activity in the Delta Science Modules. Both of these contain examples of ways that people apply science concepts to invent or use knowledge in everyday life. Some examples include:</i></p> <p>Finding the Moon Activity 12 Science and Careers <i>Finding the Moon Reader</i></p> <p>From Seed to Plants Activity 3 Science and Careers <i>From Seed to Plant Reader</i></p> <p>How Do We Learn? Activity 4 Science and Careers <i>How Do We Learn? Reader</i></p> <p>Investigating Water Act. 5, 12 Science and Careers <i>Investigating Water Reader</i></p> <p>Observing An Aquarium Activity 3 Science and Careers <i>Observing An Aquarium Reader</i></p> <p>Properties Activity 13 Science and Careers <i>Properties Reader</i></p> <p>Sunshine and Shadows Activity 1 Science and Careers <i>Sunshine and Shadows Reader</i></p> <p>Amazing Air Activity 7 Science and Careers</p> <p>Butterflies and Moths</p>	<p>Page 104 Page 14</p> <p>Page 38 Page 13</p> <p>Page 42 Page 7</p> <p>Pages 46, 100 Page 14</p> <p>Page 38 Page 13</p> <p>Page 100 Page 14</p> <p>Page 18 Page 12</p> <p>Page 68</p>

	<p>Activity 6 Science and Careers <i>Butterflies and Moths Reader</i> Classroom Plants Activity 2 Science/Soc Studies <i>Classroom Plants Reader</i> Length and Capacity Activity 1 Science/Tech/Society Force and Motion Activity 1 Science/Soc Studies <i>Force and Motion Reader</i> Plant and Animal Populations Activity 2 Science and Careers <i>Plant and Animal Pop. Reader</i> Sink or Float Activity 2 Science and Careers <i>Sink or Float Reader</i> Soil Science Activity 8 Science and Careers <i>Soil Science Reader</i> States of Matter Activity 5 Science and Careers <i>States of Matter Reader</i> Using Your Senses Activity 1 Science and Careers <i>Using Your Career Reader</i> Weather Watching Activity 9 Science and Careers <i>Weather Watching Reader</i></p>	<p>Page 58 <i>Page 14</i> Page 28 <i>Page 14</i> Page 12 Page 22 <i>Pages 12-13</i> Page 33 <i>Page 14</i> Page 27 <i>Pages 12-13</i> Page 79 <i>Pages 10-12, 13</i> Page 50 <i>Pages 13, 14</i> Page 21 <i>Page 13</i> Page 86 <i>Pages 13, 14</i></p>
N.2.B.2 Students know that, in science, it is helpful to work in a team and share findings with others. E/L	<p><i>All Delta Science Modules promote cooperative learning strategies and encourage every student to contribute to the group's success. Both shared and individual observations and discoveries are recorded on student activity sheets. For example:</i></p> <p>Finding the Moon Activity 3 From Seed to Plant Activity 11 How Do We Learn? Activity 10, 11 <i>How Do We Learn? Reader</i> Investigating Water Activity 7 Science Extension Observing An Aquarium Activity 12 Properties Activity 10 Sunshine and Shadows Activity 4 Amazing Air Activity 12 Butterflies and Moths Activity 4 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 5</p>	<p>Pages 29-37 Pages 85-90 Pages 81-93 <i>Pages 14-16</i> Page 61 Pages 117-125 Pages 75-80 Pages 33-42 Pages 101-108 Pages 39-45 <i>Page 14</i> Pages 47-53</p>

	<i>Classroom Plants Reader</i>	<i>Page 14</i>
	Force and Motion	
	Activity 9 Science and Health	Page 90
	Length and Capacity	
	Activity 4, 5	Pages 27-42
	Plant and Animal Populations	
	Activity 5, 6, 7, 8, 9	Pages 51-94
	Sink or Float?	
	Activity 12	Pages 97-103
	Soil Science	
	Activity 12	Pages 107-114
	<i>Soil Science Reader</i>	<i>Page 13</i>
	States of Matter	
	Activity 4, 5	Pages 35-50
	<i>States of Matter Reader</i>	<i>Page 14</i>
	Using Your Senses	
	Activity 8, 12	Pages 67-74, 97-104
	Weather Watching	
	Activity 12	Pages 109-116
	<i>Weather Watching Reader</i>	<i>Pages 14, 15</i>

Strand: Earth and Space Science

Unifying Concept A: Atmospheric Processes and the Water Cycle

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.2.A Students understand that changes in weather often involve water changing from one state to another.	DSM Activities	Page Number(s)
E.2.A.1 Students know the Sun is a source of heat and light. E/S	Finding the Moon Activity 1, 5 <i>Finding the Moon Reader</i> From Seed to Plant Activity 11, 14 <i>From Seed to Plant Reader</i> Investigating Water Activity 10 <i>Investigating Water Reader</i> Observing An Aquarium Activity 3, 7 Sunshine and Shadows Activity 1 Activity 3 Science and Math <i>Sunshine and Shadows Reader</i> Amazing Air Activity 7 Classroom Plants Activity 5, 12 Plant and Animal Populations Activity 7 Science Extension 1 <i>Plant and Animal Pop. Reader</i> Soil Science Activity 6 States of Matter Activity 6 Science Extension Using Your Senses Activity 1	Pages 13-20, 47-54 <i>Pages 2, 4</i> Pages 85-90, 105-110 <i>Pages 4-5, 8, 12</i> Pages 81-88 <i>Pages 8-9, 10-11</i> Pages 31-38, 69-78 Pages 13-18 Page 32 <i>Pages 2, 10</i> Pages 59-68 Pages 47-54, 105-112 Page 7 <i>Pages 4-5, 8-9, 12-13</i> Pages 51-58 Page 56 Pages 13-21

	Weather Watching Activity 3 <i>Weather Watching Reader</i>	Pages 29-36 <i>Pages 2-3, 4-5, 10</i>
E.2.A.2 Students know water on Earth can be a liquid (rain) or a solid (snow and ice), and can go back and forth from one form to the other. E/S	Investigating Water Activity 9 <i>Investigating Water Reader</i> <i>Plant and Animal Pop. Reader</i> Properties Activity 8 Science Challenge 2 <i>Properties Reader</i> Soil Science Activity 6 <i>Soil Science Reader</i> States of Matter Activity 4, 5 <i>States of Matter Reader</i> Weather Watching Activity 7 <i>Weather Watching Reader</i>	Pages 71-80 <i>Pages 3-11, 14</i> <i>Pages 4-7</i> Page 66 <i>Page 15</i> Pages 51-58 <i>Pages 4-5</i> Pages 35-50 <i>Pages 8-10, 14</i> Pages 61-68 <i>Pages 4-5, 8-9</i>
E.2.A.3 Students know weather changes from day to day and seasonally. I/S	<i>Sunshine and Shadow Reader</i> Weather Watching Activity 1 <i>Weather Watching Reader</i>	<i>Pages 12-13</i> Pages 13-20 <i>Pages 8-9, 10</i>
E.2.A.4 Students know weather can be described by measurable quantities such as temperature, wind direction and speed, and precipitation. I/L	Amazing Air Act. 7 Science/Language Arts States of Matter Activity 6 Science and Careers <i>Sunshine and Shadow Reader</i> Weather Watching Activity 12 <i>Weather Watching Reader</i>	Page 68 Page 56 <i>Pages 12-13</i> Pages 109-116 <i>Pages 6-7</i>

Unifying Concept B: Solar System and Universe

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology will continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part in our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.2.B Students understand there are objects in the sky, which display patterns.	DSM Activities	Page Number(s)
E.2.B.1 Students know objects in the sky display patterns in how they look, where they are located, and how they move. I/S	Finding the Moon Activity 1, 3, 4, 9 <i>Finding the Moon Reader</i> Sunshine and Shadows Activity 4	Pages 13-20, 29-46, 77-84 <i>Pages 6-10</i> Pages 33-42
E.2.B.2 Students know the Sun rises every day, and the Moon can rise during the day and/or the night. E/S	Finding the Moon Activity 1, 3 Sunshine and Shadows Activity 6 Science/Soc Studies Weather Watching Activity 3	Pages 13-20, 29-38 Page 56 Pages 29-36
E.2.B.3 Students know the Sun and Moon appear to move across the sky. I/L	Finding the Moon Activity 3 Sunshine and Shadows Activity 4, 6 <i>Sunshine and Shadows Reader</i>	Pages 29-38 Pages 33-42, 49-56 <i>Pages 8-9</i>
E.2.B.4 Students know the		

Moon appears to change shape over the course of a month. I/L	Finding the Moon Activity 4, 9, 10 <i>Finding the Moon Reader</i>	Pages 39-46, 77-92 <i>Pages 6-10</i>
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Unifying Concept C: Earth's Composition and Structure

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.2.B Students understand that Earth materials include rocks, soils, and water.	DSM Activities	Page Number(s)
E.2.C.1 Students know Earth is composed of different kinds of materials (e.g. rocks, soils, and water) E/S	Finding the Moon Activity 6, 8 <i>From Seed to Plant Reader</i> <i>Investigating Water Reader</i> Observing An Aquarium Activity 1 Properties Activity 7, 8 <i>Properties Reader</i> <i>Butterflies and Moths Reader</i> <i>Classroom Plants Reader</i> <i>Sink or Float?</i> Soil Science Activity 12 <i>Soil Science Reader</i> <i>States of Matter Reader</i> <i>Weather Watching Reader</i>	Pages 55-62, 71-76 <i>Page 12</i> <i>Page 3</i> Pages 15-22 Pages 53-66 <i>Pages 2, 14, 15</i> <i>Page 2</i> <i>Page 4</i> <i>Page 3</i> Pages 107-114 <i>Pages 2-3</i> <i>Page 2</i> <i>Pages 2-5</i>
E.2.C.2 Students know rocks come in many sizes and shapes, with various textures and colors. E/S	Finding the Moon Activity 8 <i>Classroom Plants Reader</i> Soil Science Activity 2 <i>Soil Science Reader</i>	Pages 71-76 <i>Page 4</i> Pages 21-28 <i>Pages 4-6</i>
E.2.C.3 Students know soils have different colors or textures depending on their composition. E/S	Finding the Moon Activity 8 Science Extension 1 From Seed to Plant Activity 12 Science Challenge 2 Classroom Plants Activity 3 Science Extension 2 <i>Classroom Plants Reader</i> Soil Science Activity 3, 7 <i>Soil Science Reader</i>	Page 76 Page 96 Page 37 <i>Page 4</i> Pages 29-36, 59-68 <i>Pages 7-8</i>

Strand: Physical Science

Unifying Concept A: Matter

Matter has various states with unique properties that can be used as a basis for organization. The relationship between the properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capability to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.2.A Students understand that matter has observable properties.	DSM Activities	Page Number(s)
P.2.A.1 Students know matter can exist as solids and as	Finding the Moon Activity 6, 7	Pages 55-69

liquids. E/S	Investigating Water Activity 9 <i>Investigating Water Reader</i> Properties Activity 7, 8 <i>Properties Reader</i> <i>Sink or Float? Reader</i> States of Matter Activity 4, 7, 10, 11 <i>States of Matter Reader</i> Weather Watching Activity 7 <i>Weather Watching Reader</i>	Pages 71-80 <i>Pages 4-9</i> Pages 53-66 <i>Page 15</i> <i>Pages 5, 6</i> Pages 35-40, 57-64, 81-96 <i>Pages 4, 5</i> Pages 61-68 <i>Pages 8-9, 11-12</i>
P.2.A.2 Students know some properties of materials can be changed by heating, freezing, mixing, cutting, or bending. E/S	Investigating Water Activity 7, 9, 10, 11, 12 <i>Investigating Water Reader</i> Observing An Aquarium Activity 1 Properties Activity 7 Science Extension <i>Properties Reader</i> Sunshine and Shadows Activity 3 Science Challenge Amazing Air Activity 4 Sink or Float? Activity 7 Soil Science Activity 2 States of Matter Activity 4, 7, 10, 11 <i>States of Matter Reader</i> Weather Watching Activity 7 <i>Weather Watching Reader</i>	Pages 55-62, 71-100 <i>Pages 6-9</i> Pages 15-22 Page 60 <i>Page 15</i> Page 32 Pages 35-42 Pages 61-66 Pages 21-36 Pages 35-40, 57-64, 81-96 <i>Pages 11, 12</i> Pages 61-68 <i>Pages 8-9, 11-12</i>
P.2.A.3 Students know matter can be categorized by observable properties, such as color, size, shape, and weight. E/S	Finding the Moon Activity 8 From Seed to Plant Activity 10 How Do We Learn? Activity 2, 3 Investigating Water Activity 8 Observing An Aquarium Activity 1 Properties Activity 2-7, 11-13 <i>Properties Reader</i> Sunshine and Shadows Activity 3 Amazing Air Activity 1 Science Extension 1 Classroom Plants Activity 2 <i>Classroom Plants Reader</i> Length and Capacity Activity 2 Science Extension 1 Plant and Animal Populations Activity 2	Pages 71-76 Pages 79-84 Pages 23-36 Pages 63-70 Pages 15-22 Pages 19-60, 81-100 <i>Pages 3-4, 5-6, 9-11, 12-13</i> Pages 27-32 Page 14 Pages 23-28 <i>Page 12</i> Page 18 Pages 25-33

	Sink or Float? Activity 2, 5 <i>Sink or Float? Reader</i> Soil Science Activity 1, 7 <i>Soil Science Reader</i> States of Matter Activity 1, 2, 3 <i>States of Matter Reader</i> Using Your Senses Activity 11 Weather Watching Activity 6	Pages 21-28, 43-52 Pages 3-4, 5, 6, 7-8 Pages 15-20, 59-68 Pages 7-8 Pages 13-34 Pages 2-3, 4, 5, 6 Pages 89-95 Pages 51-60
P.2.A.4 Students know different objects are made of many different types of materials. E/S	Finding the Moon Activity 5 From Seed to Plant Activity 1, 2 <i>How Do We Learn? Reader</i> Properties Activity 12, 13 Sunshine and Shadows Activity 3 <i>Sunshine and Shadows Reader</i> Sink or Float? Activity 2 <i>Sink or Float? Reader</i> Soil Science Activity 5 <i>Soil Science Reader</i>	Pages 55-62 Pages 15-31 Pages 10-11 Pages 87-100 Pages 27-32 Pages 6-7 Pages 21-28 Pages 9-11, 12 Pages 45-50 Pages 7-8

Unifying Concept B: Forces and Motion

The laws of motion are used to describe the effects of forces on the movement of objects.

P.2.B Students understand that position and motion of objects can be described.	DSM Activities	Page Number(s)
P.2.B.1 Students know the position and motion of an object can be changed by pushing or pulling. E/S	Finding the Moon Activity 3 Investigating Water Activity 2 <i>Investigating Water Reader</i> Observing An Aquarium Activity 4 <i>Observing An Aquarium Reader</i> Properties Activity 10 Science Extension 3 <i>Properties Reader</i> Amazing Air Activity 1, 7, 8 Force and Motion Activity 1, 2 <i>Force and Motion Reader</i> Sink or Float? Activity 4 <i>Sink or Float? Reader</i> Soil Science Activity 6, 12 <i>Soil Science Reader</i> Using Your Senses Activity 5	Pages 29-38 Pages 21-26 Page 12 Pages 39-46 Page 7 Page 80 Page 8 Pages 7-14, 59-76 Pages 13-30 Pages 2, 3, 12-13, 14 Pages 35-42 Pages 9-11, 13 Pages 51-58, 107-114 Page 9 Pages 45-52

	Weather Watching Activity 4 <i>Weather Watching Reader</i>	Pages 37-44 Page 7
P.2.B.2 Students know things move in many different ways and at different speeds (e.g., straight line, zigzag, vibration, circular motion, fast/slow). E/S	Finding the Moon Activity 3 <i>From Seed to Plant Reader</i> Investigating Water Activity 6 Observing An Aquarium Activity 4, 5 Sunshine and Shadows Activity 7 Amazing Air Activity 11, 12 Butterflies and Moths Activity 12 Science Challenge 1 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 1 Science Extension Force and Motion Activity 3, 4, 5, 6, 7, 8, 9 <i>Force and Motion Reader</i> Plant and Animal Populations Activity 6, 7 Soil Science Activity 12 Using Your Senses Activity 5 <i>Using Your Senses Reader</i> Weather Watching Activity 4, 5	Pages 29-38 Pages 14-15 Pages 47-54 Pages 39-56 Pages 57-63 Pages 95-108 Page 110 Pages 6, 10 Page 21 Pages 31-90 Pages 6, 7, 8, 10, 11, 12, 13 Pages 59-76 Pages 107-114 Pages 45-52 Page 7 Pages 37-50
P.2.B.3 Students know magnets can be used to make some things move without being touched. E/S	Properties Activity 11 <i>Properties Reader</i>	Pages 81-86 Page 8
P.2.B.4 Students know things fall to the ground unless something holds them up. E/S	From Seed to Plant Activity 4 Investigating Water Activity 5, 6 <i>Investigating Water Reader</i> Properties Activity 9 <i>Properties Reader</i> Amazing Air Activity 9 Force and Motion Activity 3 Sink or Float? Activity 6 <i>Sink or Float? Reader</i> States of Matter Activity 3 Weather Watching Activity 7 <i>Weather Watching Reader</i>	Pages 39-44 Pages 41-54 Page 12 Pages 67-73 Page 11 Pages 77-86 Pages 31-39 Pages 53-59 Pages 9-11 Pages 27-34 Pages 61-68 Pages 4-5

Unifying Concept C: Energy

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. In all energy transfers, the overall effect is that the energy is spread out uniformly.

P.2.C Students know heat, light, and sound can be produced.	DSM Activities	Page Number(s)
P.2.C.1 Students know sound is produced by vibrating objects. I/L	Finding the Moon Activity 7 Science Challenge Observing An Aquarium Activity 9 Butterflies and Moths Activity 2 Science Extension Using Your Senses Activity 5, 6 <i>Using Your Senses Reader</i>	Page 69 Pages 89-95 Page 30 Pages 45-60 Pages 6-7
P.2.C.2 Students know objects can be described as hot or cold relative to another object. I/L	Finding the Moon Activity 13 Science Challenge Investigating Water Activity 10 Sunshine and Shadows Activity 3 Science and Math Amazing Air Activity 4 <i>Investigating Water Reader</i> Plant and Animal Populations Activity 9 <i>Plant and Animal Pop. Reader</i> Sink or Float? Activity 12 Science Challenge 2 Soil Science Activity 6 <i>Soil Science Reader</i> States of Matter Activity 6, 7 <i>States of Matter Reader</i> Using Your Senses Activity 9 Weather Watching Activity 2, 3 <i>Weather Watching Reader</i>	Page 104 Pages 81-88 Page 32 Pages 35-42 Pages 6-7, 8-9, 10-11, 14 Pages 85-93 Page 7 Page 103 Pages 51-58 Page 4 Pages 51-64 Pages 7, 8, 9, 10, 14, 15 Pages 75-80 Pages 21-36 Pages 7, 8-9, 10

Strand: Life Sciences

Unifying Concept A: Heredity

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.2.A Students understand that offspring resemble their parents.	DSM Activities	Page Number(s)
L.2.A.1 Students know animals and plants have offspring that are similar to their parents. E/S	From Seed to Plant Activity 13 Observing An Aquarium Activity 10 <i>Observing An Aquarium Reader</i> Butterflies and Moths Activity; 11 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 10	Pages 97-103 Pages 97-107 Pages 10-11 Pages 97-104 Pages 3, 13 Pages 87-96

	<i>Classroom Plants Reader</i> Plant and Animal Populations Activity 6, 11	Page 5 Pages 59-68, 103-110
L.2.A.2 Students know differences exist among individuals of the same kind of plant or animal. E/S	From Seed to Plant Activity 7 <i>From Seed to Plant Reader</i> How Do We Learn? Activity 8 Observing An Aquarium Activity 4 Butterflies and Moths Activity 4 Classroom Plants Activity 9 Plant and Animal Populations Activity 2 Science and Math Soil Science Activity 8	Pages 59-66 Page 8 Pages 65-71 Pages 39-46 Pages 39-45 Pages 81-86 Page 33 Pages 69-80

Unifying Concept B: Structure of Life

All living things are composed of cells. Cells range from very simple to very complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.2.B Students understand that living things have identifiable characteristics.	DSM Activities	Page Number(s)
L.2.B.1 Students know humans and other animals use their senses to know their world. E/S	Finding the Moon Activity 1, 8 <i>Finding the Moon Reader</i> From Seed to Plant Activity 5 How Do We Learn? Activity 1 <i>How Do We Learn? Reader</i> Investigating Water Activity 1 Observing An Aquarium Activity 8 Properties Activity 1, 5 <i>Properties Reader</i> Sunshine and Shadows Activity 3 Amazing Air Activity 1 Butterflies and Moths Activity 2 Science Ext., 7, 10 Classroom Plants Activity 11 Force and Motion Activity 1, 4 Length and Capacity Activity 1 Plant and Animal Populations Activity 4 Science Extension Sink or Float? Activity 1, 2 <i>Sink or Float? Reader</i> Soil Science	Pages 13-20, 71-76 Pages 2-3, 6-9 Pages 45-52 Pages 13-22 Pages 2-6 Pages 13-20 Pages 79-88 Pages 13-18, 41-46 Pages 3, 7 Pages 27-32 Pages 7-14 Pages 30, 61-70, 89-95 Pages 97-104 Pages 13-22, 41-48 Pages 7-12 Page 50 Pages 13-28 Page 3

	Activity 1, 9 <i>Soil Science Reader</i> States of Matter Activity 3 <i>States of Matter Reader</i> Using Your Senses Activity 1, 5, 8, 10, 11 <i>Using Your Senses Reader</i> Weather Watching Activity 2, 5 <i>Weather Watching Reader</i>	Pages 15-20, 81-90 <i>Pages 7-8, 13</i> Pages 27-34 <i>Page 2</i> P 13-22, 45-52, 67-74, 81-96 <i>Pages 2, 4-12, 13</i> Pages 21-28, 45-50 <i>Pages 2-3, 6-7</i>
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Unifying Concept C: Organisms and Their Environment

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.2.C Students understand that living things live in different places.	DSM Activities	Page Number(s)
L.2.C.1 Students know plants and animals need certain resources for energy and growth. E/S	Finding the Moon Activity 6 From Seed to Plant Activity 5, 8, 11, 14 <i>From Seed to Plant Reader</i> Investigating Water Activity 1 Science and Health <i>Investigating Water Reader</i> Observing an Aquarium Activity 2, 3, 4, 5, 6, 7 <i>Observing an Aquarium Reader</i> <i>Sunshine and Shadows Reader</i> Amazing Air Activity 3 Science and Health Butterflies and Moths Activity 1 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 4, 5, 6, 7, 8 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 2, 4 <i>Plant and Animal Pop. Reader</i> Soil Science Activity 8, 9 <i>Soil Science Reader</i>	Pages 55-61 P45-52,67-72,85-90,105-110 <i>Pages 4-5, 6-8, 12</i> Page 20 <i>Page 14</i> Pages 23-78 <i>Pages 8-9, 12</i> <i>Page 2</i> Page 33 Pages 15-21 <i>Pages 2, 10, 12</i> Pages 39-80 <i>Pages 2-3, 4, 7-9, 12, 15</i> Pages 25-34, 43-50 <i>Pages 2, 4, 6, 12-13</i> Pages 69-90 <i>Page 10</i>
L.2.C.2 Students know a habitat includes food, water, shelter and space. E/S	Observing an Aquarium Activity 2 <i>Observing an Aquarium Reader</i> Plant and Animal Populations Activity 4 <i>Plant and Animal Pop. Reader</i>	Pages 23-30 <i>Pages 14-15</i> Pages 43-50 <i>Pages 2-3, 4-5, 6-7, 8-9</i>
L.2.C.3 Students know living things are found almost everywhere in the world. E/S	Finding the Moon Activity 6 Observing an Aquarium Activity 1 <i>Observing an Aquarium Reader</i> Butterflies and Moths Activity 4 Science/Soc Studies	Pages 55-61 Pages 15-21 <i>Pages 14-15</i> Page 45

	<i>Butterflies and Moths Reader</i>	<i>Page 4</i>
	Classroom Plants	
	Activity 1	Pages 15-21
	<i>Classroom Plants Reader</i>	<i>Page 3</i>
	Plant and Animal Populations	
	Activity 10 Science/Soc. Studies	Page 101
	<i>Plant and Animal Pop. Reader</i>	<i>Pages 2-3</i>

Unifying Concept D: Diversity of Life

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.2.D Students understand that there are many kinds of living things on Earth.	DSM Activities	Page Number(s)
L.2.D.1 Students know plants and animals can be sorted by observable characteristics and behaviors. E/S	From Seed to Plant Activity 1, 7, 8 Science Ext. <i>From Seed to Plant Reader</i> <i>How Do We Learn? Reader</i> Observing an Aquarium Activity 6 <i>Observing an Aquarium Reader</i> Butterflies and Moths Activity 12 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 9, 10, 11, 12 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 7, 10 <i>Plant and Animal Pop. Reader</i> Using Your Senses Activity 2 Science Extension 2	Pages 15-20, 59-66, 72 <i>Pages 2, 9, 14-15</i> <i>Page 11</i> Pages 57-68 <i>Pages 4-5, 12</i> Pages 105-111 <i>Pages 4, 6-7, 13</i> Pages 81-112 <i>Page 13</i> Pages 69-76, 95-101 <i>Pages 10-11</i> Page 30
L.2.D.2 Students know some plants and animals are extinct. E/S	Butterflies and Moths Activity 8 Science/Tech/Soc <i>Plant and Animal Pop. Reader</i>	Page 77 <i>Page 15</i>

GRADES 3-5

Strand: Nature of Science

Unifying Concept A: Scientific Inquiry

Scientific inquiry is the process by which humans systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and test explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A Students understand that science involves asking and answering questions and comparing the answers to what scientists know about the world.	DSM Activities	Page Number(s)
N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method. E/S	Amazing Air Activity 12 Butterflies and Moths Activity 3 Classroom Plants Activity 5 Force and Motion Activity 1, 2 Length and Capacity Activity 4, 5 Plant and Animal Populations Activity 5, 6, 7, 8, 9 Sink or Float? Activity 2, 3, 4, 8, 9, 10, 11 Soil Science Activity 8, 9, 10 States of Matter Activity 4, 5 Using Your Senses Activity 2, 3 Weather Watching Activity 3 Animal Behavior Activity 9, 10 Earth Movements Activity 4 Electrical Circuits Activity 6, 7 Food Chains and Webs Activity 2, 3, 8 Insect Life Activity 8 Looking at Liquids Activity 11 Magnets Activity 4 Measuring Activity 12 Plant and Animal Life Cycles Activity 7 Powders and Crystals	Pages 101-108 Pages 31-38 Pages 47-54 Pages 13-29 Pages 27-42 Pages 51-94 Pages 21-42, 67-96 Pages 69-98 Pages 35-50 Pages 23-36 Pages 29-36 Pages 59-69 Pages 39-46 Pages 51-62 Pages 23-38, 67-72 Pages 55-60 Pages 77-81 Pages 29-34 Pages 87-95 Pages 65-73

	Activity 5, 6, 7, 8, 9 Small Things & Microscopes Activity 13 Sound Activity 5 Water Cycle Activity 4 Weather Instruments Activity 3 Color and Light Activity; 7 Electromagnetism Activity 6 Erosion Activity 7 Flight and Rocketry Activity 10 Fungi – Small Wonders Activity 7 Lenses and Mirrors Activity 8, 9 Oceans Activity 3 Pollution Activity 10 Pond Life Activity 10 Rocks and Minerals Activity 6 Simple Machines Activity 3, 4 Solar Energy Activity 3, 4, 5, 6, 7, 8, 10, 11 Weather Forecasting Activity 2 You and Your Body Activity 3	Pages 35-69 Pages 79-84 Pages 45-50 Pages 39-44 Pages 31-36 Pages 61-67 Pages 43-48 Pages 59-66 Pages 99-109 Pages 45-49 Pages 55-74 Pages 31-41 Pages 71-76 Pages 69-74 Pages 47-54 Pages 25-37 Pages 21-58, 65-76 Pages 19-24 Pages 27-32
N.5.A.2 Students know how to compare the results of their experiments to what scientists already know about the world. I/L	Amazing Air Activity 11 Butterflies and Moths Activity 3 Classroom Plants Activity 6 Science/Tech/Soc Force and Motion Activity 4 Length and Capacity Activity 4, 5 Plant and Animal Populations Activity 9 Session II Sink or Float? Activity 1 Science Challenge Soil Science Activity 12 Science/Tech/Soc States of Matter Activity 6 Science and Health Using Your Senses Activity 11 Animal Behavior Activity 9	Pages 95-100 Pages 31-38 Page 64 Pages 41-47 Pages 27-42 Pages 91-93 Page 19 Page 114 Page 56 Pages 89-95 Pages 59-63

	Dinosaurs and Fossils Activity 3 Earth Movements Activity 3 Electrical Circuits Activity 10 Food Chains and Webs Activity 4 Reinforcement Insect Life Activity 8 Looking at Liquids Activity 12 Magnets Activity 12 Measuring Activity 11 Plant and Animal Life Cycles Activity 7 Science Extension 1 Powders and Crystals Activity 9 Small Things & Microscopes Activity 13 Solar System Activity 9 Sound Activity 5 Science and Math Water Cycle Activity 13 Weather Instruments Activity 3 Science Challenge Color and Light Activity 1 Reinforcement Electromagnetism Activity 9 Science Challenge Erosion Activity 3 Science/Tech/Society Flight and Rocketry Activity 6, 7 Fungi – Small Wonders Activity 11 Science Challenge Lenses and Mirrors Activity 1 Oceans Activity 3 Science Challenge Pollution Activity 6 Rocks and Minerals Activity 3, 4, 5, 6 Simple Machines Activity 3, 4 Solar Energy Activity 6 Weather Forecasting Activity 12 You and Your Body Activity 9, 10, 11, 12	Pages 29-34 Pages 29-38 Pages 77-82 Page 44 Pages 55-60 Pages 83-90 Pages 77-81 Pages 79-85 Page 73 Pages 55-61 Pages 79-84 Pages 73-81 Page 50 Pages 107-114 Page 36 Page 17 Page 68 Page 35 Pages 65-80 Page 74 Pages 7-12 Page 41 Pages 47-52 Pages 29-54 Pages 25-37 Pages 39-46 Pages 87-93 Pages 67-90
N.5.A.3 Students know how to draw conclusions from scientific evidence. E/S	Amazing Air Activity 3, 7, 8 Classroom Plants	Pages 25-34, 59-76

Activity 10, 11	Pages 87-104
Force and Motion	
Activity 5	Pages 49-56
Length and Capacity	
Activity 9	Pages 69-76
Plant and Animal Populations	
Activity 6, 9	Pages 59-68, 85-94
Sink or Float?	
Activity 4, 10	Pages 35-42, 81-88
Soil Science	
Activity 10	Pages 91-98
States of Matter	
Activity 1, 2, 9, 11	Pages 13-26, 73-80, 89-96
Using Your Senses	
Activity 3	Pages 31-36
Weather Watching	
Activity 3	Pages 29-36
Animal Behavior	
Activity 12	Pages 77-81
Dinosaurs and Fossils	
Activity 3	Pages 29-34
Earth Movements	
Activity 4	Pages 39-46
Electrical Circuits	
Activity 6, 7	Pages 51-62
Food Chains and Webs	
Activity 7, 8	Pages 59-72
Insect Life	
Activity 8, 9	Pages 55-66
Looking at Liquids	
Activity 8	Pages 57-62
Magnets	
Activity 3, 4	Pages 25-34
Plant and Animal Life Cycles	
Activity 6 Science Extension	Page 63
Powders and Crystals	
Activity 6, 7	Pages 43-54
Small Things & Microscopes	
Activity 13	Pages 79-84
Sound	
Activity 5	Pages 45-50
Water Cycles	
Activity 4 Science Challenge	Page 44
Weather Instruments	
Activity 8 Science Extension	Page 74
Electromagnetism	
Activity 5	Pages 37-42
Erosion	
Activity 11	Pages 91-97
Flight and Rocketry	
Activity 2	Pages 23-32
Fungi – Small Wonders	
Activity 7	Pages 45-49
Oceans	
Activity 3	Pages 31-42
Pollution	
Activity 10	Pages 71-76
Pond Life	
Activity 12	Pages 81-86
Rocks and Minerals	

	Activity 6, 10 Simple Machines Activity 2, 11 Solar Energy Activity 2, 3, 4, 5, 6, 8 You and Your Body Activity 3, 5	Pages 47-54, 77-84 Pages 19-24, 83-90 Pages 13-46, 53-58 Pages 27-32, 41-48
N.5.A.4 Students know graphic representations of recorded data can be used to make predictions. E/S	Amazing Air Activity 5 Butterflies and Moths Activity 8 Science and Math Force and Motion Activity 9 Science and Math Plant and Animal Populations Activity 8, 9 Sink or Float? Activity 10 Science and Math Soil Science Activity 8 Science and Math States of Matter Activity 8 Science and Math Weather Watching Activity 3 Animal Behavior Activity 3, 10 Science and Math Dinosaurs and Fossils Activity 6 Electrical Circuits Activity 8 Science and Math Food Chains and Webs Activity 3 Science and Math 1 Insect Life Activity 7 Science and Math Looking at Liquids Activity 11 Magnets Activity 10 Science and Math Measuring Activity 12 Plant and Animal Life Cycles Activity 12 Science and Math Small Things & Microscopes Activity 13 Solar System Activity 8 Science and Math Water Cycle Activity 7 Science and Math Weather Instruments Activity 6 Science and Math Electromagnetism Activity 6 Flight and Rocketry Activity 5 Science and Math Fungi – Small Wonders Activity 7 Science and Math Lenses and Mirrors Activity 2 Oceans Activity 8 Science and Math	Pages 43-49 Page 77 Page 90 Pages 77-94 Page 88 Page 79 Page 72 Pages 29-36 Pages 23, 69 Pages 47-53 Page 70 Page 37 Page 54 Pages 77-81 Page 70 Pages 87-95 Page 113 Pages 79-84 Page 72 Page 66 Page 57 Pages 43-48 Page 64 Page 49 Pages 13-19 Page 98

	Pond Life Activity 10 Science and Math Simple Machines Activity 9 Science and Math Solar Energy Activity 5 Weather Forecasting Activity 5 Science and Math You and Your Body Activity 3	Page 74 Page 76 Pages 33-38 Page 48 Pages 27-31
N.5.A.5 Students know how to plan and conduct a safe and simple investigation. E/S	Amazing Air Activity 12 Science Challenge Classroom Plants Activity 5 Reinforcement Force and Motion Activity 9 Science Challenge Plant and Animal Populations Activity 9 Sink or Float? Activity 12 Soil Science Activity 10 Science Challenge States of Matter Activity 5 Science Challenge Using Your Senses Activity 6 Science Extension 2 Weather Watching Activity 3 Reinforcement Animal Behavior Activity 11, 12 Electrical Circuits Activity 11 Science Challenge Food Chains and Webs Activity 7 Reinforcement Insect Life Activity 8 Science Challenge Looking At Liquids Activity 5 Science Challenge Magnets Activity 11 Science Challenge Measuring Activity 12 Science Challenge Plant and Animal Life Cycles Activity 12 Science Challenge Powders and Crystals Activity 2 Science Challenge Water Cycle Activity 11 Science Challenge Color and Light Activity 6 Science Challenge Electromagnetism Activity 6 Science Challenge Erosion Activity 7 Reinforcement Flight and Rocketry Activity 5 Reinforcement Fungi - Small Wonders Activity 11 Science Challenge Lenses and Mirrors	Page 108 Page 52 Page 90 Pages 85-94 Pages 97-104 Page 97 Page 50 Page 60 Page 35 Pages 71-81 Page 88 Page 65 Page 60 Page 41 Page 76 Page 95 Page 113 Page 20 Page 98 Page 59 Page 48 Page 65 Page 63 Page 74

	Activity 12 Oceans Activity 10 Science Challenge Pollution Activity 8 Reinforcement Pond Life Activity 12 Rocks and Minerals Activity 8 Science Challenge Simple Machines Activity 9 Science Extension Solar Energy Activity 9 Weather Forecasting Activity 9 Reinforcement You and Your Body Activity 4 Science Extension 1	Pages 89-94 Page 124 Page 63 Pages 81-86 Page 67 Page 76 Pages 59-64 Page 73 Page 39
N.5.A.6 Students know models are tools for learning about the things they are meant to resemble. I/S	Amazing Air Activity 11 Science Extension 2 Butterflies and Moths Activity 10, 12 Science/Arts Classroom Plants Activity 3 Science Extension 1 Force and Motion Activity 6 Plant and Animal Populations Activity 12 Sink or Float? Activity 3 Science/Tech/Soc. Soil Science Activity 6, 12 States of Matter Activity 4 Science/Soc. Studies Using Your Senses Activity 5, 6 Weather Watching Activity 8, 9 Dinosaurs and Fossils Activity 2, 3, 4 Earth Movements Activity 2, 3, 5, 6, 7, 8, 9, 10, 11 Electrical Circuits Activity 1, 5, 9, 10, 11 Food Chains and Webs Activity 11, 12 Insect Life Activity 1, 5 Magnets Activity 8, 11 Measuring Activity 11 Powders and Crystals Activity 3 Science and Math Solar System Activity 2, 5, 6, 7, 8, 9, 10 Sound Activity 3 Water Cycle Activity 9, 10, 11, 12	Page 100 Pages 95, 110 Page 37 Pages 57-64 Pages 111-118 Page 34 Pages 51-58, 107-114 Page 40 Pages 45-60 Pages 69-86 Pages 21-40 Pages 21-38, 47-104 Pages 13-18, 45-50, 71-88 Pages 89-102 Pages 7-13, 35-39 Pages 53-58, 71-76 Pages 79-85 Page 26 Pages 21-26, 43-92 Pages 29-36 Pages 77-106

	Weather Instruments Activity 4, 5 Color and Light Activity 11 Electromagnetism Activity 7, 8, 10 Erosion Activity 2, 6 Flight and Rocketry Activity 3, 4, 7, 8, 11, 12 Lenses and Mirrors Activity 10 Science Challenge Oceans Activity 4, 5, 6, 7, 8 Pollution Activity 5 Science Challenge Pond Life Activity 6 Science and the Arts Rocks and Minerals Activity 2 Simple Machines Activity 5 Solar Energy Activity 13 Weather Forecasting Activity 4, 5 You and Your Body Activity 1, 2, 4, 6	Pages 37-50 Pages 93-100 Pages 49-62, 69-76 Pages 21-28, 51-58 Pgs 33-54, 73-90, 111-130 Page 82 Pages 43-98 Page 45 Page 47 Pages 21-28 Pages 39-48 Pages 83-88 Pages 33-48 Pages 13-26, 33-40, 49-54
N.5.A.7 Students know observable patterns can be used to organize items and ideas. E/S	Amazing Air Activity 4 Butterflies and Moths Activity 3 Force and Motion Activity 4 Science and Math Length and Capacity Activity 8 Plant and Animal Populations Activity 8 Sink or Float? Activity 2, 10 Soil Science Activity 2, 3, 4 States of Matter Activity 5 Using Your Senses Activity 6 Weather Watching Activity 3 Dinosaurs and Fossils Activity 6, 7 Earth Movements Activity 12 Electrical Circuits Activity 7 Science Extension 1 Food Chains and Webs Activity 12 Science Extension 2 Looking at Liquids Activity 5 Magnets	Pages 35-42 Pages 31-38 Page 47 Pages 59-67 Pages 77-83 Pages 21-28, 81-88 Pages 21-44 Pages 41-50 Pages 53-60 Pages 29-36 Pages 47-60 Pages 105-110 Page 62 Page 101 Pages 35-41

	Activity 4 Measuring	Pages 29-34
	Activity 8 Powders and Crystals	Pages 57-63
	Activity 3 Small Things & Microscopes	Pages 21-26
	Activity 13 Solar System	Pages 79-84
	Activity 9 Sound	Pages 73-81
	Activity 7, 8, 9 Water Cycle	Pages 59-82
	Activity 10 Weather Instruments	Pages 85-90
	Activity 6 Science and Math Color and Light	Page 57
	Activity 6 Electromagnetism	Pages 53-59
	Activity 6 Erosion	Pages 43-48
	Activity 4 Flight and Rocketry	Pages 37-42
	Activity 5 Science and Math Fungi – Small Wonders	Page 64
	Activity 7 Science and Math Lenses and Mirrors	Page 49
	Activity 4 Oceans	Pages 27-34
	Activity 9 Rocks and Minerals	Pages 99-112
	Activity 7, 8 Simple Machines	Pages 55-68
	Activity 6 Science and Math Solar Energy	Page 55
	Activity 5 Weather Forecasting	Pages 33-38
	Activity 2, 3, 4, 5, 6, 7, 8 You and Your Body	Pages 19-68
	Activity 9, 10, 11, 12	Pages 67-90

Unifying Concept B: Science, Technology, and Society

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society influences the development of technology and its impact on culture.

N.5.B Students understand that many people, from all cultures and levels of ability, contribute to the fields of science and technology.	DSM Activities	Page Number(s)
N.5.B.1 Students know that, throughout history, people of diverse cultures have provided scientific knowledge and technologies. E/S	Amazing Air Activity 12 Science/Soc. Studies Butterflies and Moths Activity 2 Science/Soc. Studies <i>Butterflies and Moths Reader</i> <i>Classroom Plants Reader</i> Force and Motion Activity 1	Page 108 Page 30 <i>Page 14</i> <i>Page 14</i> Pages 13-22

<i>Force and Motion Reader</i>	<i>Pages 12-13</i>
Length and Capacity	
Activity 4 Science/Soc. Studies	Page 36
Sink or Float?	
Activity 12 Science/Tech/Soc.	Page 103
Soil Science	
Activity 7 Science/Soc. Studies	Page 67
States of Matter	
Activity 6 Science/Soc. Studies	Page 56
<i>Using Your Senses Reader</i>	<i>Page 14</i>
Weather Watching	
Activity 8 Science/Soc. Studies	Page 76
<i>Weather Watching Reader</i>	<i>Page 13</i>
Animal Behavior	
Activity 8 Science/Soc. Studies	Page 57
Dinosaurs and Fossils	
Activity 3 Science/Soc. Studies	Page 34
<i>Dinosaurs and Fossils Reader</i>	<i>Pages 14-15</i>
<i>Earth Movements Reader</i>	<i>Pages 6, 14</i>
Electrical Circuits	
Activity 3 Science/Soc. Studies	Page 35
<i>Electrical Circuits Reader</i>	<i>Pages 12-13</i>
<i>Food Chains and Webs Reader</i>	<i>Pages 11, 12</i>
Insect Life	
Activity 11 Science/Soc. Studies	Page 78
Magnets	
Activity 4 Science/Soc. Studies	Page 34
<i>Magnets Reader</i>	<i>Pages 9, 13</i>
Measuring	
Activity 13	Pages 97-104
<i>Plant/Animal Life Cycles Reader</i>	<i>Page 14</i>
Powders and Crystals	
Activity 9 Science/Soc. Studies	Page 69
Small Things & Microscopes	
Activity 13 Science and Health	Page 84
Solar System	
Activity 10 Science/Tech/Soc.	Page 92
<i>Solar System Reader</i>	<i>Page 14</i>
Sound	
Activity 2 Science/Soc. Studies	Page 28
<i>Water Cycle Reader</i>	<i>Page 13</i>
Weather Instruments	
Activity 4 Sci. Chall., 5 Sci. Ext.	Pages 42, 50
<i>Weather Instruments Reader</i>	<i>Page 10 –11</i>
Color and Light	
Activity 1 Science/Soc. Studies	Page 18
<i>Color and Light Reader</i>	<i>Page 14</i>
Electromagnetism	
Activity 11 Science and Careers	Page 83
<i>Electromagnetism Reader</i>	<i>Page 14</i>
Flight and Rocketry	
Activity 5 Science and Careers	Page 64
<i>Flight and Rocketry Reader</i>	<i>Pages 6, 12, 13, 14, 15</i>
Fungi – Small Wonders	
Activity 2 Science and Health	Page 18
Lenses and Mirrors	
Activity 3 Science/Soc. Studies	Page 26
<i>Oceans Reader</i>	<i>Page 14</i>
Pollution	
Activity 12 Science/Soc. Studies	Page 88

	<i>Pollution Reader</i> Pond Life Activity 10 Science/Soc. Studies <i>Rocks and Minerals Reader</i> Simple Machines Activity 1 Science/Soc. Studies <i>Simple Machines Reader</i> Solar Energy Activity 9 Science/Soc. Studies Weather Forecasting Activity 5, 9 Sci./Soc. Studies <i>Weather Forecasting Reader</i> <i>You and Your Body Reader</i>	<i>Page 14</i> <i>Page 74</i> <i>Page 14</i> <i>Page 18</i> <i>Pages 2, 12, 13</i> <i>Page 64</i> <i>Pages 48, 74</i> <i>Pages 10, 11</i> <i>Pages 12, 13</i>
N.5.B.2 Students know technologies impact society, both positively and negatively. E/S	Amazing Air Activity 10 Science/Tech/Soc. Butterflies and Moths Activity 8 Science/Tech/Soc. Classroom Plants Activity 6 Science/Tech/Soc. <i>Classroom Plants Reader</i> Force and Motion Activity 9 Science and Health <i>Force and Motion Reader</i> Length and Capacity Activity 4, 5 Plant and Animal Populations Activity 10 Science/Tech/Soc. Sink or Float? Activity 10 Science/Tech/Soc. Soil Science Activity 12 Science/Tech/Soc. <i>Soil Science Reader</i> States of Matter Activity 12 Science/Tech/Soc. Using Your Senses Activity 1 Science/Soc. Studies <i>Using Your Senses Reader</i> Weather Watching Activity 9 Science/Tech/Soc. <i>Weather Watching Reader</i> Animal Behavior Activity 11 Science/Tech/Soc. Dinosaurs and Fossils Activity 12 Science/Tech/Soc. Earth Movements Activity 3 Science and Health <i>Earth Movements Reader</i> Electrical Circuits Activity 11 <i>Electrical Circuits Reader</i> Food Chains and Webs Activity 12 Science/Tech/Soc. <i>Food Chains and Webs Reader</i> Insect Life Activity 4 Science/Soc. Studies Looking at Liquids Activity 12 Science/Tech/Soc. Magnets Activity 10 Science and Health	<i>Page 94</i> <i>Page 77</i> <i>Page 64</i> <i>Page 15</i> <i>Page 90</i> <i>Pages 12-13, 14, 15</i> <i>Pages 27-42</i> <i>Page 101</i> <i>Page 88</i> <i>Page 114</i> <i>Pages 10-12, 14</i> <i>Page 101</i> <i>Page 21</i> <i>Pages 14, 15</i> <i>Page 86</i> <i>Pages 14, 15</i> <i>Page 75</i> <i>Page 95</i> <i>Page 37</i> <i>Pages 10, 14</i> <i>Pages 83-88</i> <i>Pages 14, 15</i> <i>Page 101</i> <i>Pages 12, 13</i> <i>Page 34</i> <i>Page 90</i> <i>Page 70</i>

	<p><i>Magnets Reader</i></p> <p>Measuring Activity 5</p> <p>Plant & Animal Life Cycles Activity 12 Science and Health</p> <p>Powders and Crystals Activity 8 Science/Tech/Soc.</p> <p>Small Things & Microscopes Activity 13 Science/Tech/Soc.</p> <p>Solar System Activity 2 Science/Tech/Soc. 1</p> <p>Sound Activity 4 Science/Tech/Soc. <i>Sound Reader</i></p> <p>Water Cycle Activity 12 Science/Tech/Soc. <i>Water Cycle Reader</i></p> <p>Weather Instruments Activity 10 Science/Tech/Soc. <i>Weather Instruments Reader</i></p> <p>Color and Light Activity 10 Science/Tech/Soc. <i>Color and Light Reader</i></p> <p>Electromagnetism Activity 11 Science/Soc. Studies <i>Electromagnetism Reader</i></p> <p>Erosion Activity 10 <i>Erosion Reader</i></p> <p>Flight and Rocketry Activity 9 Science and Health <i>Flight and Rocketry Reader</i></p> <p>Fungi – Small Wonders Activity 11 Science/Tech/Soc.</p> <p>Lenses and Mirrors Activity 11 Science and Health</p> <p>Oceans Activity 9 Science/Tech/Soc. <i>Oceans Reader</i></p> <p>Pollution Activity 6 <i>Pollution Reader</i></p> <p>Pond Life Activity 11 Science/Tech/Soc.</p> <p>Rocks and Minerals Activity 11</p> <p>Simple Machines Activity 9 Science and Health</p> <p>Solar Energy Activity 8 Science and Health</p> <p>Weather Forecasting Activity 12 <i>Weather Forecasting Reader</i></p> <p>You and Your Body Activity 3 Science/Soc. Studies <i>You and Your Body Reader</i></p>	<p><i>Pages 8-9, 10, 12, 14, 15</i></p> <p><i>Pages 37-43</i></p> <p><i>Page 113</i></p> <p><i>Page 60</i></p> <p><i>Page 84</i></p> <p><i>Page 26</i></p> <p><i>Page 42</i> <i>Pages 8, 9, 14</i></p> <p><i>Page 106</i> <i>Pages 14-15</i></p> <p><i>Page 87</i> <i>Pages 12-13</i></p> <p><i>Page 91</i> <i>Page 9</i></p> <p><i>Page 83</i> <i>Pages 12, 14, 15</i></p> <p><i>Pages 83-89</i> <i>Page 14</i></p> <p><i>Page 97</i> <i>Page 12</i></p> <p><i>Page 74</i></p> <p><i>Page 88</i></p> <p><i>Page 111</i> <i>Page 11</i></p> <p><i>Pages 47-52</i> <i>Pages 7, 8, 9-12, 13</i></p> <p><i>Page 80</i></p> <p><i>Pages 85-92</i></p> <p><i>Page 76</i></p> <p><i>Page 58</i></p> <p><i>Pages 87-93</i> <i>Pages 12-13</i></p> <p><i>Page 31</i> <i>Page 12</i></p>
N.5.B.3 Students know the benefits of working with a	<i>All Delta Science Modules promote cooperative learning</i>	

team and sharing findings. E/L	<i>strategies and encourage every student to contribute to the group's success. Both shared and individual observations and discoveries are recorded on student activity sheets.</i>	
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Strand: Earth and Space Science

Unifying Concept A: Atmospheric Processes and the Water Cycle

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A Students understand the water cycle's relationship to weather.	DSM Activities	Page Number(s)
E.5.A.1 Students know the Sun is the main source of energy for planet Earth. E/S	Amazing Air Activity 7 Session II Classroom Plants Activity 8 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 7 Science Extension <i>Plant and Animal Pop. Reader</i> States of Matter Activity 8 Using Your Senses Activity 1 Weather Watching Activity 3 <i>Weather Watching Reader</i> Food Chains and Webs Activity 3, 12 Science Ext. 2 <i>Food Chains and Webs Reader</i> Insect Life Activity 10 Small Things & Microscopes Activity 8 Solar System Activity 1, 9 <i>Solar System Reader</i> Water Cycle Activity 5 <i>Water Cycle Reader</i> Weather Instruments Activity 6 <i>Weather Instruments Reader</i> <i>Color and Light Reader</i> <i>Electromagnetism Reader</i> Fungi – Small Wonders Activity 8 Oceans Activity 5 <i>Oceans Reader</i> <i>Pollution Reader</i> Pond Life Activity 3 Science Challenge Solar Energy Activity 1, 2	Page 67 Pages 73-79 Page 9 Page 76 Pages 12-13 Pages 65-72 Pages 13-21 Pages 30-36 Pages 2-3, 4, 10 Pages 31-38, 101 Pages 6-7 Pages 67-71 Pages 49-54 Pages 13-20, 73-82 Page 3 Pages 45-51 Pages 6, 10-11 Pages 51-57 Pages 2, 6 Pages 2-3, 4 Page 12 Pages 51-56 Pages 55-63 Page 10 Page 15 Page 25 Pages 7-20

	Weather Forecasting Activity 1 Science Extension 2 <i>Weather Forecasting Reader</i> You and Your Body Activity 7 Science and Health	Page 18 Page 4 Page 60
E.5.A.2 Students know the processes of the water cycle, including the role of the Sun. E/S	States of Matter Activity 9 Science Extension 2 Weather Watching Activity 6, 7 <i>Weather Watching Reader</i> Water Cycle Activity 2, 3, 4, 5, 6, 8, 9, 11-13 <i>Water Cycle Reader</i> Weather Instruments Activity 11 <i>Weather Instruments Reader</i> Oceans Activity 5 <i>Oceans Reader</i> Pollution Activity 9 Solar Energy Activity 13 Science Extension 1 Weather Forecasting Activity 1 Science Ext. 2, 9 <i>Weather Forecasting Reader</i>	Page 79 Pages 51-68 Pages 4-5 Pages 23-60, 69-84, 91-114 Pages 10-11 Pages 89-96 Page 6 Pages 55-64 Page 10 Pages 65-70 Page 88 Pages 18, 69-74 Page 4
E.5.A.3 Students know most of Earth's surface is covered with fresh or salt water. W/L	States of Matter Activity 4 Science/Soc Studies Earth Movements Activity 1 <i>Solar System Reader</i> Water Cycle Activity 1 <i>Water Cycle Reader</i> Erosion Activity 10 Oceans Activity 1 <i>Oceans Reader</i> Pollution Activity 5 Science and Math Pond Life Activity 3 Science and Math	Page 40 Pages 13-19 Page 6 Pages 13-21 Pages 2-5 Pages 83-89 Pages 13-22 Page 2 Page 45 Page 25
E.5.A.4 Students know the role of water in many phenomena related to weather (e.g., thunderstorms, snowstorms, flooding, drought). E/S	Soil Science Activity 10, 11, 12 <i>Soil Science Reader</i> States of Matter Activity 10 Science Extension 1 Weather Watching Activity 7 <i>Weather Watching Reader</i> Water Cycle Activity 12 <i>Water Cycle Reader</i> Weather Instruments Activity 9, 10, 11 <i>Weather Instruments Reader</i> Color and Light	Pages 91-114 Page 9 Page 88 Pages 61-68 Pages 4, 11-12 Pages 99-106 Pages 10-11 Pages 75-96 Pages 6, 8

	Activity 1 Reinforcement Erosion Activity 12 <i>Erosion Reader</i> Oceans Activity 5 <i>Oceans Reader</i> Pollution Activity 9 <i>Pollution Reader</i> Solar Energy Activity 13 Weather Forecasting Activity 9 <i>Weather Forecasting Reader</i>	Page 17 Pages 99-104 <i>Page 15</i> Pages 55-64 <i>Page 10</i> Pages 65-70 <i>Page 7</i> Page 83-88 Pages 69-74 <i>Pages 2, 4-5, 9</i>
E.5.A.5 Students know air is a substance that surrounds us, takes up space, and moves around us as wind. I/S	Amazing Air Activity 1, 2, 3, 10 Weather Watching Activity 1, 4 <i>Weather Watching Reader</i> <i>Solar System Reader</i> <i>Water Cycle Reader</i> Weather Instruments Activity 1, 2, 3, 4, 5 <i>Weather Instruments Reader</i> Erosion Activity 11 Flight and Rocketry Activity 1 Oceans Activity 7 <i>Oceans Reader</i> <i>Pollution Reader</i> Weather Forecasting Activity 1, 4, 5, 12 <i>Weather Forecasting Reader</i>	Pages 7-33, 87-94 Pages 13-20, 37-44 <i>Page 3</i> <i>Page 6</i> <i>Pages 7, 12</i> Pages 13-50 <i>Pages 2, 4, 5, 12-13</i> Pages 91-98 Pages 13-22 Pages 75-88 <i>Pages 7, 10</i> <i>Pages 6, 8</i> Pages 13-18, 33-48, 87-94 <i>Pages 2, 3, 6, 7, 8, 9, 10</i>

Unifying Concept B: Solar System and Universe

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology will continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part in our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B Students understand that there are many components in the solar system including Earth.	DSM Activities	Page Number(s)
E.5.B.1 Students know there are more stars than anyone can easily count, but they are not scattered evenly, and they are not all the same in brightness or color. W/L	Solar System Activity 11 <i>Solar System Reader</i> <i>Color and Light Reader</i>	Pages 93-100 <i>Page 15</i> <i>Page 14</i>
E.5.B.2 Students know the solar system includes the Sun, planets, and moons. E/S	Solar System Activity 1 <i>Solar System Reader</i>	Pages 13-20 <i>Pages 2-13</i>
E.5.B.3 Students know stars are like the Sun, but they are	Solar System Activity 11	Pages 93-100

so far away that they look like points of light. W/L	<i>Solar System Reader</i> <i>Color and Light Reader</i>	Page 3 Page 14
E.5.B.4 Students know there are cyclical patterns of observable objects in the solar system. I/S	Weather Watching Activity 3 Solar System Activity 12 <i>Solar System Reader</i> Weather Instruments Activity 6 Science Challenge 1 Oceans Activity 9	Pages 29-36 Pages 101-110 Pages 2-3, 7, 13 Page 57 Pages 99-111
E.5.B.5 Students know the patterns of stars in the sky stay the same (e.g., the constellations), although they appear to move across the sky nightly, and different stars can be seen in different seasons. (14.5.2) W/S	Solar System Activity 12	Pages 101-110

Unifying Concept C: Earth's Composition and Structure

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.	DSM Activities	Page Number(s)
E.5.C.1 Students know fossils are evidence of past life. E/S	Dinosaurs and Fossils Activity 2 <i>Dinosaurs and Fossils Reader</i> Earth Movements Activity 3 <i>Earth Movements Reader</i> Rocks and Minerals Activity 1 <i>Rocks and Minerals Reader</i>	Pages 21-28 Pages 4-5 Pages 29-37 Page 6 Page 13-19 Page 15
E.5.C.2 Students know water, wind, and ice constantly change the Earth's land surface by eroding rock and soil in some places and depositing them in other areas. E/S	Classroom Plants Activity 6 Science/Tech/Soc Soil Science Activity 5, 6, 10, 12 <i>Soil Science Reader</i> Weather Watching Activity 9, 10 Earth Movements Activity 3 <i>Earth Movements Reader</i> Water Cycle Activity 13 Science/Soc. Studies Erosion Activity 2, 5, 6, 9, 10, 11, 12 <i>Erosion Reader</i> Oceans Activity 6 Science Extension <i>Oceans Reader</i> Rocks and Minerals Activity 9 Science Extension 2 <i>Rocks and Minerals Reader</i>	Page 64 Pgs 45-58, 91-98, 107-114 Pages 4-5, 9 Pages 77-100 Pages 29-37 Page 15 Page 114 Pages 21-28, 43-58, 75-100 Pages 5, 8-9 Page 73 Page 6 Page 76 Pages 10, 13
E.5.C.3 Students know	Soil Science	

landforms may result from slow processes (e.g. erosion and deposition) and fast processes (e.g. volcanoes, earthquakes, landslides, flood, and human activity). E/S	<p>Activity 12 <i>Soil Science Reader</i></p> <p>Earth Movements Activity 3, 9, 10, 11 <i>Earth Movements Reader</i></p> <p>Water Cycle Activity 13 Sci. Chall./Soc. Stud.</p> <p>Erosion Activity 2, 5, 6, 9, 10, 11, 12 <i>Erosion Reader</i></p> <p>Oceans Activity 4 <i>Oceans Reader</i></p> <p>Pond Life Activity 12 Science Challenge</p> <p>Rocks and Minerals Activity 9 Science/Soc. Studies <i>Rocks and Minerals Reader</i></p>	<p>Pages 107-114 <i>Pages 4-6, 9, 10-12</i></p> <p>Pages 29-37, 79-104 <i>Pages 6-11, 12-13</i></p> <p>Page 114</p> <p>Pages 21-28, 43-58, 75-100 <i>Pages 4, 8-9, 10-13</i></p> <p>Pages 43-54 <i>Page 4</i></p> <p>Page 86</p> <p>Page 76 <i>Page 13</i></p>
E.5.C.4 Students know rock is composed of different combinations of minerals. E/S	<p>Soil Science Activity 5 Science Extension 1</p> <p>Earth Movements Activity 3, 8</p> <p>Erosion Activity 1 <i>Erosion Reader</i></p> <p>Rocks and Minerals Activity 10 <i>Rocks and Minerals Reader</i></p>	<p>Page 50</p> <p>Pages 29-37, 71-77</p> <p>Pages 13-19 <i>Page 5</i></p> <p>Pages 77-84 <i>Page 9, 10-11, 12, 13</i></p>
E.5.C.5 Students know soil varies from place to place and has both biological and mineral components. E/S	<p>Soil Science Activity 1, 2, 3, 4 <i>Soil Science Reader</i></p> <p>Food Chains and Webs Activity 1, 2, 9 <i>Food Chains and Webs Reader</i></p> <p>Plant and Animal Life Cycles Activity 12 Session II</p> <p>Water Cycle Activity 2 Science Extension</p> <p>Erosion Activity 8 <i>Erosion Reader</i></p>	<p>Pages 15-44 <i>Pages 2-3, 7-8, 12</i></p> <p>Pages 15-29, 73-79 <i>Page 6</i></p> <p>Pages 108-113</p> <p>Page 29</p> <p>Page 67-73 <i>Pages 7, 14</i></p>

Strand: Physical Science

Unifying Concept A: Matter

Matter has various states with unique properties that can be used as a basis for organization. The relationship between the properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capability to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A Students understand properties of objects and materials.	DSM Activities	Page Number(s)
P.5.A.1 Students know matter exists in different states (i.e., solid, liquid, gas) which have distinct physical properties. E/S	<p>Amazing Air Activity 1-6, 5 Science Ext.</p> <p>Classroom Plants Activity 8 Science Challenge</p> <p>Sink or Float? Activity 2, 3, 4</p>	<p>Pages 7-57, 49</p> <p>Page 79</p> <p>Pages 21-42</p>

	<i>Sink or Float? Reader</i> Soil Science Activity 6 <i>Soil Science Reader</i> States of Matter Activity 7, 8, 9, 10, 11 <i>States of Matter Reader</i> Weather Watching Activity 6, 7 <i>Weather Watching Reader</i> Dinosaurs and Fossils Activity 2 Earth Movements Activity 1, 3, 10 <i>Earth Movements Reader</i> Looking at Liquids Activity 11 Powders and Crystals Activity 9 Small Things & Microscopes Activity 5 Solar System Activity 10 Session III Water Cycle Activity 1 <i>Water Cycle Reader</i> Weather Instruments Activity 7 <i>Weather Instruments Reader</i> Erosion Activity 12 <i>Erosion Reader</i> Flight and Rocketry Activity 3 Science Challenge Oceans Activity 1 Science/Soc. Studies <i>Oceans Reader</i> Rocks and Minerals Activity 7 <i>Rocks and Minerals Reader</i> Solar Energy Act. 12 Science Challenge, 13 Simple Machines Activity 3 Science Extension 2 Weather Forecasting Activity 10 Science and Math <i>Weather Forecasting Reader</i> You and Your Body Activity 7	Pages 5, 6 Pages 51-58 Page 4 Pages 57-96 Pages 3, 4-6, 7-10 Pages 51-68 Pages 4-5 Pages 21-28 Pages 13-20, 29-37, 87-96 Pages 3, 10-11 Pages 77-81 Pages 63-69 Pages 31-35 Pages 89-92 Pages 13-22 Pages 4, 8-9 Pages 59-66 Page 8 Pages 99-104 Pages 2, 13 Page 43 Page 22 Page 10 Pages 55-59 Page 2 Pages 82, 83-88 Page 31 Page 80 Page 4 Pages 55-60
P.5.A.2 Students know heating or cooling can change some common materials, such as water, from one state to another. E/S	Soil Science Activity 6 <i>Soil Science Reader</i> States of Matter Activity 4, 5, 7, 8, 9, 10, 11 Weather Watching Activity 6, 7 <i>States of Matter Reader</i> <i>Weather Watching Reader</i> Earth Movements	Pages 51-58 Page 4 Pages 35-50, 57-96 Pages 51-68 Pages 7-10 Pages 4-5

	<p>Activity 3, 7 <i>Earth Movements Reader</i> Looking at Liquids Activity 11 Science Extension Powders and Crystals Activity 9 Small Things & Microscopes Activity 5 Science Extension Water Cycle Activity 1 <i>Water Cycle Reader</i> Weather Instruments Activity 7 Science Extension <i>Weather Instruments Reader</i> Erosion Activity 10 Science/Soc. Studies <i>Erosion Reader</i> Flight and Rocketry Activity 3 Science Challenge Oceans Activity 5 <i>Oceans Reader</i> Rocks and Minerals Activity 7 Science Extension 1 <i>Rocks and Minerals Reader</i> Solar Energy Act. 12 Science Challenge, 13 Simple Machines Activity 3 Science Extension 2 Weather Forecasting Activity 9 <i>Weather Forecasting Reader</i> You and Your Body Activity 7</p>	<p>Pages 29-37, 63-69 <i>Pages 3, 10-11</i> Page 81 Pages 63-69 Page 35 Pages 13-22 <i>Page 8-9</i> Page 66 <i>Pages 2, 6</i> Page 89 <i>Pages 2-3</i> Page 43 Pages 55-64 <i>Page 10</i> Page 59 <i>Pages 2, 9</i> Pages 82, 83-88 Page 31 Pages 69-74 <i>Page 4</i> Pages 55-60</p>
<p>P.5.A.3 Students know materials can be classified by their observable physical and chemical properties (e.g., magnetism, conductivity, density, and solubility). E/S</p>	<p>Sink or Float? Activity 2 Science Challenge <i>Sink or Float? Reader</i> Soil Science Activity 1, 2, 3, 4 <i>Soil Science Reader</i> States of Matter Activity 10 Science Challenge Dinosaurs and Fossils Activity 9, 10 <i>Dinosaurs and Fossils</i> Earth Movements Activity 8 <i>Earth Movements Reader</i> Electrical Circuits Activity 6, 7 Looking at Liquids Activity 4 Science Extension 1 Magnets Activity 2 <i>Magnets Reader</i> Powders and Crystals Activity 10 Small Things & Microscopes Activity 5</p>	<p>Page 27 <i>Pages 7-8, 14, 15</i> Pages 15-44 <i>Pages 7-8</i> Page 88 Pages 67-82 <i>Pages 2-3, 6</i> Pages 71-77 <i>Page 15</i> Pages 51-62 Page 33 Pages 19-24 <i>Page 2-3</i> Pages 71-78 Pages 31-35</p>

	<p>Sound Activity 3 <i>Water Cycle Reader</i></p> <p>Color and Light Activity 4 Science Challenge <i>Color and Light Reader</i></p> <p>Electromagnetism Activity 1 <i>Electromagnetism Reader</i></p> <p>Erosion Activity 4</p> <p>Flight and Rocketry Activity 3</p> <p>Lenses and Mirrors Activity 8</p> <p>Oceans Activity 3 Science Extension 2 <i>Oceans Reader</i></p> <p>Pollution Activity 8</p> <p>Rocks and Minerals Activity 3, 4, 5, 6, 10 <i>Rocks and Minerals Reader</i></p> <p>Solar Energy Activity 8</p> <p>Simple Machines Activity 3</p> <p>Weather Forecasting Activity 10</p> <p>You and Your Body Activity 8, 9, 10, 11</p>	<p>Pages 29-35 <i>Page 3</i></p> <p>Page 43 <i>Pages 6, 7, 8-9</i></p> <p>Pages 13-17 <i>Page 2</i></p> <p>Pages 37-42</p> <p>Pages 33-43</p> <p>Pages 55-65</p> <p>Page 41 <i>Page 3</i></p> <p>Pages 59-64</p> <p>Pages 29-54, 77-84 <i>Pages 3, 4-6, 9-12</i></p> <p>Pages 53-58</p> <p>Pages 25-31</p> <p>Pages 75-80</p> <p>Pages 61-84</p>
<p>P.5.A.4 Students know that, by combining two or more materials, the properties of that material can be different from the original materials. E/S</p>	<p>Sink or Float? Activity 7</p> <p>Soil Science Activity 7 <i>Soil Science Reader</i></p> <p>States of Matter Activity 10 Science Challenge Activity 11 <i>Pages 3, 4-6, 7-10</i></p> <p>Dinosaurs and Fossils Activity 2</p> <p>Earth Movements Activity 3</p> <p>Electrical Circuits Activity 7 Science/Tech/Soc.</p> <p>Looking at Liquids Activity 12 Science Challenge</p> <p>Powders and Crystals Activity 11</p> <p>Color and Light Activity 2, 3</p> <p>Oceans Activity 3</p> <p>Pollution Activity 8 Reinforcement</p> <p>Rocks and Minerals Activity 2 <i>Rocks and Minerals Reader</i></p>	<p>Pages 61-66</p> <p>Pages 59-68 <i>Pages 7-8</i></p> <p>Page 88 Pages 89-96 <i>Page 11</i></p> <p>Pages 21-28</p> <p>Pages 29-37</p> <p>Page 62</p> <p>Page 90</p> <p>Pages 79-86</p> <p>Pages 19-36</p> <p>Pages 31-41</p> <p>Page 63</p> <p>Pages 21-28 <i>Pages 9-12</i></p>

	Solar Energy Activity 8 Science Extension	Page 58
P.5.A.5 Students know the mass of a material remains constant whether it is together, in parts, or in a different state. E/S	Amazing Air Activity 4 Science Extension Sink or Float? Activity 5 States of Matter Activity 9 Science Extension 2 Water Cycle Activity 11 Flight and Rocketry Activity 3 Science Challenge Pollution Activity 9 Science Extension 2 Solar Energy Activity 13 Science Extension 1 Weather Forecasting Activity 1 Science Ext. 2	Page 42 Pages 43-51 Page 79 Pages 91-98 Page 43 Page 70 Page 88 Pages 18
P.5.A.6 Students know materials are composed of parts that are too small to be seen without magnification. E/S	Amazing Air Activity 9, 11 Butterflies and Moths Activity 12 Science Challenge 1 Classroom Plants Activity 6, 7 Plant and Animal Populations Activity 7 Sink or Float? Activity 6 <i>Sink or Float? Reader</i> Soil Science Activity 5 Science Extension 1 <i>Soil Science Reader</i> States of Matter Activity 8 Science Extension 2 <i>States of Matter Reader</i> Using Your Senses Activity 11 Earth Movements Activity Electrical Circuits Activity 8 <i>Magnets Reader</i> Powders and Crystals Activity 3 Small Things & Microscopes Activity 5, 6, 7, 8, 9, 10, 11 Solar System Activity 10 Session I Sound Activity 3 Water Cycle Activity 4 Weather Instruments Activity 7 Color and Light Activity 4 Science Extension <i>Electromagnetism Reader</i> Flight and Rocketry Activity 3	Pages 77-86, 95-100 Page 110 Pages 55-72 Pages 69-76 Pages 53-59 <i>Pages 4, 5, 6, 14, 15</i> Page 50 <i>Page 7</i> Page 72 <i>Pages 3, 4, 5, 6</i> Pages 89-95 Pages 71-77 Pages 63-70 <i>Page 6</i> Pages 21-26 Pages 31-71 Pages 83-89 Pages 29-35 Pages 39-44 Pages 59-66 Page 43 <i>Pages 2-3</i> Pages 33-43

	Oceans Activity 2	Pages 23-30
	Pollution Activity 4	Pages 31-38
	Pond Life Activity 7	Pages 49-55
	Rocks and Minerals Activity 7, 8, 9	Pages 55-76
	Solar Energy Activity 8 Science Extension	Page 58
	Weather Forecasting Activity 9 Science Extension 1 <i>You and Your Body Reader</i>	Page 74 Pages 2-3

Unifying Concept B: Forces and Motion

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B Students understand that forces can change the position and motion of an object.	DSM Activities	Page Number(s)
P.5.B.1 Students know that, when an unbalanced force is applied to an object, the object either speeds up, slows down, or goes in a different direction. E/S	Force and Motion Activity 1 <i>Force and Motion Reader</i> Sink or Float? Activity 1 Science Challenge Soil Science Activity 12 Earth Movements Activity 8 Looking at Liquids Activity 4 Magnets Activity 1 Solar System Activity 10 Weather Instruments Activity 4 Science Challenge Electromagnetism Activity 3 Flight and Rocketry Activity 12 <i>Flight and Rocketry Reader</i> Oceans Activity 9 Simple Machines Activity 1 <i>Simple Machines Reader</i>	Pages 13-22 <i>Pages 2, 3</i> Page 19 Pages 107-114 Pages 71-77 Pages 29-33 Pages 13-18 Pages 83-92 Page 42 Pages 25-29 Pages 121-130 <i>Page 7</i> Pages 99-111 Pages 13-18 <i>Page 2</i>
P.5.B.2 Students know how the strength of a force and mass of an object influence the amount of change in an object's motion. E/S	Force and Motion Activity 2 <i>Force and Motion Reader</i> Sink or Float? Activity 2 Magnets Activity 11 Science Extension 2 Solar System Activity 2 Sound Activity 7 Weather Instruments Activity 5	Pages 23-30 <i>Page 2</i> Pages 21-27 Page 76 Pages 21-26 Pages 59-65 Pages 43-50

	Electromagnetism Activity 3 Erosion Activity 9 Flight and Rocketry Activity 9 <i>Flight and Rocketry Reader</i> Simple Machines Activity 3 Science Extension 1	Pages 25-29 Pages 75-81 Pages 91-97 <i>Page 7</i> Page 31
P.5.B.3 Students know a magnetic force causes certain kinds of objects to attract and repel each other. E/S	Magnets Activity 2, 11, 12 <i>Magnets Reader</i> Electromagnetism Activity 1 <i>Electromagnetism Reader</i>	Pages 19-24, 71-82 <i>Pages 2-3</i> Pages 13-18 <i>Pages 6-7</i>
P.5.B.4 Students know electrically charged particles can attract or repel other electrically-charged material (eg., static electricity). E/S	Electrical Circuits Activity 2 Science Extension <i>Electrical Circuits Reader</i> Magnets Activity 11 Water Cycle Activity 9 Science Extension 2 <i>Electromagnetism Reader</i> Weather Forecasting Activity 9 Science Extension 3	Page 25 <i>Page 2</i> Pages 71-76 Page 83 <i>Pages 3, 4</i> Activity 74
P.5.B.5 Students know Earth's gravity pulls any object toward it without touching it. E/S	Force and Motion Activity 2 Science Challenge 1 <i>Force and Motion Reader</i> Plant and Animal Life Cycles Activity 11 Science Extension 1 Solar System Activity 10 <i>Erosion Reader</i> Flight and Rocketry Activity 2 <i>Flight and Rocketry Reader</i> Oceans Activity 9 Science Challenge <i>Oceans Reader</i> <i>Rocks and Minerals Reader</i> <i>Simple Machines Reader</i>	Page 29 <i>Page 2</i> Page 103 Pages 83-92 <i>Pages 9, 11, 16</i> Pages 23-32 <i>Page 4</i> Page 111 <i>Page 9</i> <i>Page 10</i> <i>Page 2</i>

Unifying Concept C: Energy

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. In all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C Students understand that energy exists in different forms.	DSM Activities	Page Number(s)
P.5.C.1 Students know light can be described in terms of simple properties (e.g., color, brightness, reflection). I/S	Butterflies and Moths Activity 12 Science Challenge 2 Classroom Plants Activity 5 Using Your Senses Activity 1, 3 Science Extension <i>Using Your Senses Reader</i> Weather Watching Activity 11 Animal Behavior Activity 5 Science Challenge Electrical Circuits	Page 110 Pages 47-53 Pages 13-21, 36 <i>Page 5</i> Pages 101-108 Page 37

	<p>Activity 8, 9, 10, 11 Food Chains and Webs Activity 3 Science Challenge Insect Life Activity 9 Solar Energy Activity 11 <i>Solar Energy Reader</i> Water Cycle Activity 10 Color and Light Activity 1, 4 Connections <i>Color and Light Reader</i> Lenses and Mirrors Activity 1 <i>Pollution Reader</i> Rocks and Minerals Activity 3 <i>Rocks and Minerals Reader</i> Solar Energy Activity 1 Weather Forecasting Activity 11</p>	<p>Pages 63-88 Page 37 Pages 61-66 Pages 93-100 Pages 7, 13, 15 Pages 85-90 Pages 13-18, 43 Pages 2-3, 4-6, 7, 8, 10-14 Pages 7-12 Page 13 Pages 29-34 Page 5 Pages 7-12 Pages 81-86</p>
P.5.C.2 Students know the wave characteristics of sound. E/S	<p>Using Your Senses Activity 5, 6 <i>Using Your Senses Reader</i> Animal Behavior Activity 2 Science Extension 3 Food Chains and Webs Activity 4 Science Extension Sound Activity 3 <i>Sound Reader</i> You and Your Body Activity 14</p>	<p>Pages 45-60 Page 7 Page 17 Page 45 Pages 29-35 Pages 2-3, 4-5, 6-7, 8, 9 Pages 97-102</p>
P.5.C.3 Students know heat is often produced as a byproduct when one form of energy is converted to another form (e.g., when machines and living organisms convert stored energy to motion). E/S	<p>Force and Motion Activity 4 Weather Watching Activity 8 Electrical Circuits Activity 8, 9, 10, 11 <i>Electrical Circuits Reader</i> Powders and Crystals Activity 9 Science Extension Solar System Activity 10 <i>Electromagnetism Reader</i> <i>Pollution Reader</i> Simple Machines Activity 3</p>	<p>Pages 31-47 Pages 69-76 Pages 63-88 Page 3 Page 69 Pages 83-92 Page 2 Page 9 Pages 25-32</p>
P.5.C.4 Students know heat can move from one object to another by conduction, and some materials conduct heat better than others. E/S	<p>States of Matter Activity 4, 5 Weather Watching Activity 3</p>	<p>Pages 35-50 Pages 29-36</p>
P.5.C.5 Students know the organization of a simple electrical circuit (i.e., battery or generator, wire, a complete	<p>Electrical Circuits Activity 1 <i>Electrical Circuits Reader</i> Magnets</p>	<p>Pages 13-18 Pages 4, 5, 6, 7</p>

loop through which the electrical current can pass). I/L	Activity 11 Science Extension 3 Powders and Crystals	Page 76
	Activity 10 Science Challenge Electromagnetism	Page 78
	Activity 5 <i>Electromagnetism Reader</i>	Pages 37-48 Pages 4-5
	Solar Energy	
	Activity 10	Pages 65-70

Strand: Life Sciences

Unifying Concept A: Heredity

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A Students understand that some characteristics are inherited and some are not.	DSM Activities	Page Number(s)
L.5.A.1 Students know some physical characteristics and behaviors that are inherited in animals and plants. E/S	Butterflies and Moths Activity 4 <i>Butterflies and Moths Reader</i> <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 11 <i>Plant and Animal Pop. Reader</i> Animal Behavior Activity 3 Science/Lang. Arts Dinosaurs and Fossils Activity 8 Science Challenge Food Chains and Webs Activity 6 Science/Lang. Arts Insect Life Activity 1 Plant and Animal Life Cycles Activity 7 Small Things & Microscopes Activity 8, 9	Page 39-45 Pages 6-7 Page 5 Pages 103-110 Pages 5, 7 Page 23 Page 66 Page 58 Pages 7-13 Pages 65-73 Pages 49-59
L.5.A.2 Students know reproduction is an essential characteristic for the continuation of every species. E/S	Butterflies and Moths Activity 11 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 9, 10 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 4, 5, 6 Animal Behavior Activity 12 Plant and Animal Life Cycles Activity 5, 7 <i>Plant/Animal Life Cycles Reader</i> Fungi – Small Wonders Activity 2 Pond Life Activity 10	Pages 97-104 Pages 8-12 Pages 81-95 Pages 5, 10, 11-12, 13 Pages 43-68 Pages 77-81 Pages 49-56, 65-73 Page 3 Pages 13-18 Pages 69-74
L.5.A.3 Students know that, while offspring resemble their parents and each other, they also exhibit differences in characteristics. E/S	Insect Life Activity 7 Plant and Animal Life Cycles Activity 9	Pages 47-54 Pages 83-89

L.5.A.4 Students know how to observe and describe variations among individuals within the human population. E/S	Using Your Senses Activity 1 Dinosaurs and Fossils Activity 6 You and Your Body Activity 8 Science Extension	Pages 13-21 Pages 47-53 Page 66
L.5.A.5 Students know some animal behaviors are learned. E/S	Butterflies and Moths Activity 3 Using Your Senses Activity 12 Science/Soc Studies Animal Behavior Activity 10 Science Challenge Pond Life Activity 9 Science Extension 1 You and Your Body Activity 3	Pages 31-38 Page 103 Page 69 Page 67 Pages 27-31

Unifying Concept B: Structure of Life

All living things are composed of cells. Cells range from very simple to very complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B Students understand that living things have specialized structures that perform a variety of life functions.	DSM Activities	Page Number(s)
L.5.B.1 Students know plants and animals have structures that enable them to grow, reproduce, and survive. E/S	Butterflies and Moths Activity 2, 3, 7, 8, 9, 10, 11 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 6, 7, 8, 9, 10, 11 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 4, 5, 6, 7, 10, 11 Soil Science Activity 9 <i>Soil Science Reader</i> Using Your Senses Activity 1, 8, 9 Animal Behavior Activity 1, 4, 12 Dinosaurs and Fossils Activity 8 <i>Dinosaurs and Fossils Reader</i> Food Chains and Webs Activity 4, 5, 6 <i>Food Chains and Webs Reader</i> Insect Life Activity 9, 12 Plant and Animal Life Cycles Activity 3, 6 <i>Plant/Animal Life Cycles Reader</i> Small Things & Microscopes Activity 7, 8, 9 Fungi – Small Wonders Activity 1, 2, 3, 4 Oceans Activity 10, 11 <i>Oceans Reader</i> Pond Life Activity 8, 9, 10	Pages 23-38, 61-104 <i>Pages 4-5, 8-12</i> Pages 55-104 <i>Pages 6-12</i> Pages 43-76, 95-110 Pages 81-89 <i>Pages 14-15</i> Pages 13-22, 67-80 Pages 7-12, 25-29, 77-81 Pages 61-66 <i>Page 7, 8-11</i> Pages 39-58 <i>Pages 4-5</i> Pages 61-66, 79-83 Pages 33-42, 57-64 <i>Pages 4-5</i> Pages 43-59 Pages 7-29 Pages 113-134 <i>Pages 12-13</i> Pages 57-74

	Solar Energy Activity 1 You and Your Body Activity 1, 2, 4, 7, 8 <i>You and Your Body Reader</i>	Pages 7-11 Pages 13-26, 33-40, 55-66 <i>Pages 2-3, 4-11</i>
L.5.B.2 Students know living things have predictable life cycles. E/S	Butterflies and Moths Activity 9, 11 <i>Butterflies and Moths Reader</i> Classroom Plants Activity 2, 3, 9, 10 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 5 Animal Behavior Activity 1, 12 <i>Dinosaurs and Fossils Reader</i> Insect Life Activity 2, 7 Plant and Animal Life Cycles Activity 9, 10, 11 <i>Plant/Animal Life Cycles Reader</i> Small Things & Microscopes Activity 13 Fungi – Small Wonders Activity 4 Pond Life Activity 5 Science Challenge	Pages 79-88, 97-104 <i>Pages 8-12, 13</i> Pages 23-38, 81-96 <i>Page 5</i> Pages 51-58 Pages 7-12, 77-81 <i>Pages 6-7</i> Pages 15-22, 47-54 Pages 83-104 <i>Pages 2, 3-6, 7-12, 13</i> Pages 79-84 Pages 25-29 Page 40

Unifying Concept C: Organisms and Their Environment

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.	DSM Activities	Page Number(s)
L.5.C.1 Students know the organization of simple food webs. E/S	<i>Classroom Plants Reader</i> Plant and Animal Populations Activity 12 <i>Plant and Animal Pop. Reader</i> Soil Science Activity 8 Food Chains and Webs Activity 11, 12 <i>Food Chains and Webs Reader</i> Insect Life Activity 10 Small Things & Microscopes Activity 10 Science/Soc. Studies Oceans Activity 11 Science Extension 2 Pond Life Activity 11 Solar Energy Activity 1	<i>Pages 2-3</i> Pages 111-118 <i>Pages 12-13</i> Pages 69-79 Pages 89-102 <i>Pages 6-9</i> Pages 67-71 Page 66 Page 134 Pages 75-80 Pages 7-11
L.5.C.2 Students know organisms interact with each other and with the non-living	Butterflies and Moths Activity 4, 7, 8 <i>Butterflies and Moths Reader</i>	Pages 39-46, 61-78 <i>Pages 8-12</i>

<p>parts of their ecosystem. E/S</p>	<p>Classroom Plants Activity 5, 6, 7, 8 <i>Classroom Plants Reader</i></p> <p>Plant and Animal Populations Activity 4 <i>Plant and Animal Pop. Reader</i></p> <p>Sink or Float? Activity 6</p> <p>Soil Science Activity 8, 9, 10 <i>Soil Science Reader</i></p> <p>Using Your Senses Activity 4, 5, 6, 7, 8, 9, 10, 11</p> <p>Weather Watching Activity 2 Science and Math <i>Weather Watching Reader</i></p> <p>Animal Behavior Activity 5, 6, 7, 8, 9, 10</p> <p>Food Chains and Webs Activity 4, 5, 6 <i>Food Chains and Webs Reader</i></p> <p>Insect Life Activity 8</p> <p>Plant and Animal Life Cycles Activity 6 Science Extension <i>Plant/Animal Life Cycles Reader</i></p> <p>Small Things & Microscopes Activity 10, 11</p> <p>Erosion Activity 3</p> <p>Fungi – Small Wonders Activity 5 Science Extension 2</p> <p>Oceans Activity 10, 11 <i>Oceans Reader</i></p> <p>Pollution Activity 10 <i>Pollution Reader</i></p> <p>Pond Life Activity 5, 6, 7, 8, 9</p> <p>Solar Energy Activity 1</p> <p>You and Your Body Activity 3, 14 <i>You and Your Body Reader</i></p>	<p>Pages 47-80 <i>Pages 10, 11-12</i></p> <p>Pages 43-50 <i>Pages 8-9, 10-11</i></p> <p>Pages 53-59</p> <p>Pages 69-97 <i>Pages 14-15</i></p> <p>Pages 37-96</p> <p>Page 28 <i>Page 13</i></p> <p>Pages 31-69</p> <p>Pages 39-58 <i>Pages 4-5, 12</i></p> <p>Pages 55-60</p> <p>Page 63 <i>Pages 11, 13</i></p> <p>Pages 61-71</p> <p>Pages 29-36</p> <p>Page 35</p> <p>Pages 113-134 <i>Pages 12-13</i></p> <p>Pages 71-76 <i>Pages 10, 13</i></p> <p>Pages 35-67</p> <p>Pages 7-11</p> <p>Pages 27-32, 97-102 <i>Page 14</i></p>
<p>L.5.C.3 Students know changes to an environment can be beneficial or detrimental to different organisms. E/S</p>	<p>Butterflies and Moths Activity 8 Science/Tech/Soc</p> <p>Classroom Plants Activity 5 <i>Classroom Plants Reader</i></p> <p>Plant and Animal Populations Activity 5 Science Extension <i>Plant and Animal Pop. Reader</i></p> <p>Sink or Float? Activity 7 Science/Tech/Soc</p> <p>Soil Science Activity 8 Science Challenge <i>Soil Science Reader</i></p> <p>Weather Watching</p>	<p>Page 77</p> <p>Pages 47-54 <i>Page 15</i></p> <p>Page 57 <i>Page 15</i></p> <p>Page 66</p> <p>Page 79 <i>Pages 14-15</i></p>

	<p>Activity 7 Science/Tech/Soc Animal Behavior</p> <p>Activity 5 Science Extension 2 Dinosaurs and Fossils</p> <p>Activity 1 Science Challenge <i>Dinosaurs and Fossils Reader</i></p> <p>Food Chains and Webs</p> <p>Activity 9, 12 Science/Tech/Soc. <i>Food Chains and Webs Reader</i></p> <p>Insect Life</p> <p>Activity 8 Science/Tech/Soc.</p> <p>Plant and Animal Life Cycles</p> <p>Activity 3 Science Challenge</p> <p>Small Things & Microscopes</p> <p>Activity 12</p> <p>Erosion</p> <p>Activity 11 Science/Soc. Studies</p> <p>Fungi – Small Wonders</p> <p>Activity 7</p> <p>Oceans</p> <p>Activity 11 Science Extension 1</p> <p>Pollution</p> <p>Activity 6 <i>Pollution Reader</i></p> <p>Pond Life</p> <p>Activity 10</p> <p>Solar Energy</p> <p>Activity 1</p>	<p>Page 68</p> <p>Page 37</p> <p>Page 19 Page 12</p> <p>Pages 73-79, 101 Page 10, 12</p> <p>Page 60</p> <p>Page 41</p> <p>Pages 73-77</p> <p>Page 97</p> <p>Pages 45-49</p> <p>Page 134</p> <p>Pages 47-52 Pages 7, 9, 10, 11, 12, 13</p> <p>Pages 69-74</p> <p>Pages 7-11</p>
L.5.C.4 Students know all organisms, including humans, can cause changes in their environments. E/S	<p>Butterflies and Moths</p> <p>Activity 8 Science/Tech/Soc</p> <p>Classroom Plants</p> <p>Activity 9 Science and Health <i>Classroom Plants Reader</i></p> <p>Plant and Animal Populations</p> <p>Activity 5 Science/Tech/Soc <i>Plant and Animal Pop. Reader</i></p> <p>Soil Science</p> <p>Activity 10, 12 <i>Soil Science Reader</i></p> <p>Sink or Float?</p> <p>Activity 7 Science/Tech/Soc</p> <p>Dinosaurs and Fossils</p> <p>Activity 1 Science/Soc. Studies</p> <p>Food Chains and Webs</p> <p>Activity 9 <i>Food Chains and Webs Reader</i></p> <p>Insect Life</p> <p>Activity 13 Science/Soc. Studies</p> <p>Plant and Animal Life Cycles</p> <p>Activity 12</p> <p>Small Things & Microscopes</p> <p>Activity 12, 13</p> <p>Erosion</p> <p>Activity 3</p> <p>Fungus – Small Wonders</p> <p>Activity 8 Science/Tech/Soc. <i>Oceans Reader</i></p> <p>Pollution</p> <p>Activity 10 Science/Soc. Studies</p>	<p>Page 77</p> <p>Page 86 Page 15</p> <p>Page 57 Page 15</p> <p>Pages 91-98, 107-114 Pages 14-15</p> <p>Page 66</p> <p>Page 19</p> <p>Pages 73-79 Pages 12, 13, 14</p> <p>Page 89</p> <p>Pages 105-113</p> <p>Pages 73-84</p> <p>Pages 29-36</p> <p>Page 56 Page 14</p> <p>Page 76</p>

	<i>Pollution Reader</i> Pond Life Activity 6 Science Extension 2 Solar Energy Activity 11 Science and Careers	Pages 4, 5, 7-13 Page 47 Page 76
L.5.C.5 Students know plants and animals have adaptations allowing them to survive in specific ecosystems. E/S	Butterflies and Moths Activity 8 Science/Tech/Soc Classroom Plants Activity 11 <i>Classroom Plants Reader</i> Plant and Animal Populations Activity 10 Science Extension <i>Plant and Animal Pop. Reader</i> Sink or Float? Activity 6 Soil Science Activity 9 <i>Soil Science Reader</i> States of Matter Activity 5 Science and Health Using Your Senses Activity 2 Science Extension 2 Weather Watching Activity 3 Science Challenge Animal Behavior Activity 5 Dinosaurs and Fossils Activity 8 <i>Dinosaurs and Fossils Reader</i> Food Chains and Webs Activity 5, 6, 7 <i>Food Chains and Webs Reader</i> Insect Life Activity 12 Plant and Animal Life Cycles Activity 11 Science Extension 1 Small Things & Microscopes Activity 11 Fungi – Small Wonders Activity 4, 5 Oceans Activity 10 <i>Oceans Reader</i> Pollution Activity 6 Science and Careers Pond Life Activity 10	Page 77 Pages 97-104 Page 13 Page 101 Pages 4-5, 6-7 Pages 53-59 Pages 81-90 Pages 14-15 Page 50 Page 30 Page 37 Pages 31-37 Pages 61-66 Page 7 Page 47-66 Pages 4-5 Pages 79-82 Page 103 Pages 67-71 Pages 25-35 Pages 113-124 Pages 12-13 Page 52 Pages 69-74

Unifying Concept D: Diversity of Life

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.	DSM Activities	Page Number(s)
<p>L.5.D.1 Students know animals and plants can be classified according to their observable characteristics. E/S</p>	<p>Butterflies and Moths Activity 12 <i>Butterflies and Moths Reader</i></p> <p>Classroom Plants Activity 1 <i>Classroom Plants Reader</i></p> <p>Plant and Animal Populations Activity 1, 2, 3 <i>Plant and Animal Pop. Reader</i></p> <p>Using Your Senses Activity 2 Science Extension 2</p> <p>Animal Behavior Activity 1</p> <p>Dinosaurs and Fossils Activity 10, 11 <i>Dinosaurs and Fossils Reader</i></p> <p>Food Chains and Webs Activity 4 <i>Food Chains and Webs Reader</i></p> <p>Insect Life Activity 1</p> <p>Plant and Animal Life Cycles Activity 11 <i>Plant/Animal Life Cycles Reader</i></p> <p>Small Things & Microscopes Activity 8, 9</p> <p>Fungi – Small Wonders Activity 1, 2, 3, 4</p> <p>Oceans Activity 11, 12 <i>Oceans Reader</i></p> <p>Pond Life Activity 5, 6, 7, 8, 9, 10</p>	<p>Pages 105-110 <i>Pages 2-3, 6-7</i></p> <p>Pages 15-22 <i>Pages 2-3</i></p> <p>Pages 15-41 <i>Pages 2-3, 5, 10-11</i></p> <p>Page 30</p> <p>Pages 7-12</p> <p>Pages 75-90 <i>Pages 2-3</i></p> <p>Pages 39-46 <i>Pages 4, 6</i></p> <p>Pages 7-13</p> <p>Pages 97-104 <i>Pages 7-12</i></p> <p>Pages 49-59</p> <p>Pages 7-29</p> <p>Pages 125-142 <i>Pages 12-13</i></p> <p>Pages 35-74</p>
<p>L.5.D.2 Students know fossils are evidence of past life. E/S</p>	<p>Dinosaurs and Fossils Activity 1, 2, 3 <i>Dinosaurs and Fossils Reader</i></p> <p>Earth Movements Activity 3 <i>Earth Movements Reader</i></p> <p>Rocks and Minerals Activity 1 <i>Rocks and Minerals Reader</i></p>	<p>Pages 13-34 <i>Pages 4-5</i></p> <p>Pages 29-38 <i>Page 6</i></p> <p>Pages 13-20 <i>Page 15</i></p>
<p>L.5.D.3 Students know differences among individuals within a species give them advantages and/or disadvantages in surviving and reproducing. E/S</p>	<p>Butterflies and Moths Activity 8 Science/Tech/Soc</p> <p>Animal Behavior Activity 11 Science Extension</p> <p>Dinosaurs and Fossils Activity 8</p> <p>Food Chains and Webs</p>	<p>Page 77</p> <p>Page 75</p> <p>Pages 61-66</p>

	Activity 5 Science Challenge	Page 52
	<i>Food Chains and Webs Reader</i>	Page 11
	Insect Life	
	Activity 11 Science/Soc. Studies	Page 78

GRADES 6-8

Strand: Nature of Science

Unifying Concept A: Scientific Inquiry

Scientific inquiry is the process by which humans systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and test explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.8.A Students understand that scientific knowledge requires critical consideration of verifiable evidence obtained from inquiry and appropriate investigations.	DSM Activities	Page Number(s) * DSM III available soon
N.8.A.1 Students know how to identify and critically evaluate information in data, tables, and graphs. E/S	Electromagnetism Activity 6 Erosion Activity 7 Flight and Rocketry Activity 5 Science and Math Fungi – Small Wonders Activity 7 Lenses and Mirrors Activity 5 Oceans Activity 3 Pollution Activity 7 Pond Life Activity 10 Science and Math Rocks and Minerals Activity 10 Simple Machines Activity 1 Solar Energy Activity 4 Weather Forecasting Activity 12 You and Your Body Activity 9, 10, 11 Astronomy Activity 4, 5 DNA –From Genes to Proteins Activity 9 Earth, Moon, and Sun Activity 1, 2 <i>Earth, Moon, and Sun Reader</i> Earth Processes Activity 9 Electrical Circuits Activity 7 Science and Math Famous Scientists Activity 7 If Shipwrecks Could Talk Activity 4	Pages 43-48 Pages 59-66 Page 64 Pages 45-49 Pages 35-40 Pages 31-41 Pages 53-58 Page 74 Pages 77-84 Pages 13-18 Pages 27-32 Pages 87-93 Pages 67-84 * * Pages 13-28 <i>Page 5</i> Pages 81-87 * Pages 65-75 Pages 35-45

	Matter and Change Activity 1, 2 <i>Matter and Change Reader</i> Newton's Toy Box Activity 9 <i>Newton's Toy Box Reader</i> Plants in Our World Activity 3	Pages 13-28 <i>Pages 4-5, 15, 20</i> Pages 61-65 <i>Pages 3, 5</i> *
N.8.A.2 Students know how to critically evaluate information to distinguish between fact and opinion. E/S	Electromagnetism Activity 5 Science Extension 1 Erosion Activity 7 Flight and Rocketry Activity 5 Science and Math Fungi – Small Wonders Activity 7 Lenses and Mirrors Activity 12 Oceans Activity 1 Science Challenge Pollution Activity 11 Rocks and Minerals Activity 9 Simple Machines Activity 4 Solar Energy Activity 5 Weather Forecasting Activity 11 You and Your Body Activity 12 Astronomy Activity 8 DNA –From Genes to Proteins Activity 1 Science Challenge Earth, Moon, and Sun Activity 9 Earth Processes Activity 1, 2, 11, 12, 13, 14 Electrical Connections Activity 2 Science Extension 2 Famous Scientists Activity 7 If Shipwrecks Could Talk Activity 9 Matter and Change Activity 2 Newton's Toy Box Activity 8, 9 Plants in Our World Activity 3	Page 42 Pages 59-66 Page 64 Pages 45-49 Pages 89-94 Page 22 Pages 77-81 Pages 69-76 Pages 33-37 Pages 33-38 Pages 81-86 Pages 85-89 * * Pages 81-92 Pages 13-28, 97-130 * Pages 65-75 Pages 89-94 Pages 21-27 Pages 55-66 *
N.8.A.3 Students know different explanations can be given for the same evidence. E/S	Color and Light Activity 3 Erosion Activity 8, 9 Fungi – Small Wonders Activity 12 Oceans	Pages 29-35 Pages 67-82 Pages 75-79

	<p>Activity 7, 8 Pollution Activity 11 Pond Life Activity 6 Rocks and Minerals Activity 4 Science and Math Simple Machines Activity 10, 11 Solar Energy Activity 4 Weather Forecasting Activity 11 You and Your Body Activity 3 Astronomy Activity 8 DNA –From Genes to Proteins Activity 1 Science Challenge <i>DNA–Genes to Proteins Reader</i> Earth, Moon, and Sun Activity 9 <i>Earth, Moon, and Sun Reader</i> Earth Processes Activity 1, 14 Science Challenge <i>Earth Processes Reader</i> Electrical Connections Activity 8 Science Extension Famous Scientists Activity 11 Science/Lang. Arts If Shipwrecks Could Talk Activity 10 Matter and Change Activity 4 Science Extension <i>Matter and Change Reader</i> Newton’s Toy Box Activity 1 Science Extension <i>Newton’s Toy Box Reader</i> Plants in Our World Activity 1 Science Challenges</p>	<p>Pages 75-98 Pages 77-81 Pages 41-47 Page 40 Pages 77-90 Pages 27-32 Pages 81-86 Pages 27-31 * * Page 21 Pages 81-92 Page 20 Pages 13-22, 121-130 Pages 4-5 * Page 113 Pages 95-101 Page 44 Page 22 Page 16 Page 10 *</p>
<p>N.8.A.4 Students know how to design and conduct a controlled experiment. E/L</p>	<p>Color and Light Activity 6 Science Challenge Electromagnetism Activity 10 Erosion Activity 12 Science Challenge Flight and Rocketry Activity 5 Reinforcement Fungi – Small Wonders Activity 11 Science Challenge Lenses and Mirrors Activity 12 Oceans Activity 7 Science Challenge 2 Pollution Activity 10 Science Challenge Pond Life Activity 12 Rocks and Minerals</p>	<p>Page 59 Pages 69-76 Page 104 Page 63 Page 74 Pages 89-94 Page 88 Page 76 Pages 81-86</p>

	Activity 8 Science Challenge Simple Machines Activity 4 Science Challenge Solar Energy Activity 11, 12 You and Your Body Activity 3 Science Extension Earth Processes Activity 9 Reinforcement Electrical Connections Activity 10 Science Challenge Famous Scientists Activity 1 Science Extension If Shipwrecks Could Talk Activity 7 Reinforcement Matter and Change Activity 6 Reinforcement Newton's Toy Box Activity 13 Science Challenge Plants in Our World Activity 4 Science Challenge	Page 67 Page 37 Pages 71-82 Page 31 Page 86 * Page 19 Page 75 Page 60 Page 90 *
N.8.A.5 Students know how to use appropriate technology and laboratory procedures safely for observing, measuring, recording, and analyzing data. E/L	Color and Light Activity 1 Electromagnetism Activity 5, 6 Erosion Activity 5, 6, 7 Flight and Rocketry Activity 8 Fungi – Small Wonders Activity 4 Science Extension Lenses and Mirrors Activity 12 Oceans Activity 3 Session II Pollution Activity 7, 8 Pond Life Activity 2 Rocks and Minerals Activity 6, 8, 9 Simple Machines Activity 8 Solar Energy Activity 2, 3, 4, 5, 6, 7, 8 Weather Forecasting Activity 4, 5 You and Your Body Activity 5 Astronomy Activity 1, 9 DNA-From Genes to Proteins Activity 2, 3, 4, 5 Earth, Moon, and Sun Activity 5, 6, 7 Earth Processes Activity 9 Electrical Connections Activity 3, 4, 5, 6	Pages 13-18 Pages 37-48 Pages 43-66 Pages 81-89 Page 29 Pages 89-94 Pages 37-41 Pages 53-64 Pages 13-18 Pages 47-54, 61-76 Pages 65-69 Pages 13-58 Pages 33-48 Pages 41-48 * * Pages 45-60 Pages 81-88 *

	<p>If Shipwrecks Could Talk Activity 2, 3, 4, 5, 6</p> <p>Famous Scientists Activity 10</p> <p>Matter and Change Activity 1, 2, 3, 6</p> <p>Newton’s Toy Box Activity 2, 3, 4</p> <p>Plants in Our World Activity 5, 6, 7, 8, 9, 10, 11</p>	<p>Pages 19-68</p> <p>Pages 95-103</p> <p>Pages 13-36, 53-62</p> <p>Pages 19-38</p> <p>*</p>
<p>N.8.A.6 Students know scientific inquiry includes evaluating results of scientific investigations, experiments, observations, theoretical and mathematical models, and explanations proposed by other scientists. E/S</p>	<p>Color and Light Activity 2, 4</p> <p>Electromagnetism Activity 6</p> <p>Erosion Activity 7</p> <p>Flight and Rocketry Activity 3</p> <p>Lenses and Mirrors Activity 9</p> <p>Fungi – Small Wonders Activity 6</p> <p>Oceans Activity 3</p> <p>Pollution Activity 10</p> <p>Pond Life Activity 11</p> <p>Rocks and Minerals Activity 3, 4, 5, 6, 9, 10</p> <p>Simple Machines Activity 1</p> <p>Solar Energy Activity 11, 12, 13</p> <p>Weather Forecasting Activity 5 Science and Math</p> <p>You and Your Body Activity 3</p> <p>Astronomy Activity 6 Science Extension</p> <p>DNA-From Genes to Proteins Activity 1 Science Challenge <i>DNA-Genes to Proteins Reader</i></p> <p>Earth, Moon, and Sun Activity 3 Science Challenge <i>Earth, Moon, and Sun Reader</i></p> <p>Earth Processes Activity 1, 14 Science Challenge <i>Earth Processes Reader</i></p> <p>Electrical Connections Activity 4 Science/Soc. Studies</p> <p>Famous Scientists Activity 10</p> <p>If Shipwrecks Could Talk Activity 10</p> <p>Matter and Change Activity 4 Science Extension <i>Matter and Change Reader</i></p> <p>Newton’s Toy Box</p>	<p>Pages 19-28, 37-44</p> <p>Pages 43-48</p> <p>Pages 59-66</p> <p>Pages 33-43</p> <p>Pages 67-74</p> <p>Pages 37-44</p> <p>Pages 31-41</p> <p>Pages 71-76</p> <p>Pages 75-80</p> <p>Pages 29-54, 69-84</p> <p>Pages 13-18</p> <p>Pages 71-88</p> <p>Page 48</p> <p>Pages 27-31</p> <p>*</p> <p>*</p> <p><i>Pages 21, 22</i></p> <p>Page 35 <i>Page 20</i></p> <p>Pages 13-22, 121-130 <i>Pages 4-5, 21</i></p> <p>*</p> <p>Pages 95-103</p> <p>Pages 95-101</p> <p>Page 44 <i>Page 22</i></p> <p>Pages 25-31</p>

	Activity 3 <i>Newton's Toy Box Reader</i> Plants in Our World Activity 5 Science Challenge	Page 10 *
N.8.A.7 Students know there are multiple methods for organizing items and information. E/S	Electromagnetism Activity 3 Erosion Activity 7 Flight and Rocketry Activity 5 Science and Math Fungi – Small Wonders Activity 7 Science and Math Oceans Activity 2 Science and Math Pollution Activity 1 Science and Math Pond Life Activity 11 Rocks and Minerals Activity 10 Simple Machines Activity 3 Science and Math Solar Energy Activity 10 Weather Forecasting Activity 6 You and Your Body Activity 3 Astronomy Activity 8 Reinforcement DNA-From Genes to Proteins Activity 6 Science Extension <i>DNA-Genes to Proteins Reader</i> Earth, Moon, and Sun Activity 8 Science/Soc. Studies Earth Processes Activity 9 Electrical Connections Activity 3 Famous Scientists Activity 8 Science and Math Matter and Change Activity 1 Science and Math <i>Matter and Change Reader</i> Newton's Toy Box Activity 9 Science and Math <i>Newton's Toy Box Reader</i> Plants in Our World Activity 3 Science and Math <i>Plants in Our World Reader</i>	Pages 25-30 Pages 59-66 Page 64 Page 49 Page 30 Page 17 Pages 75-80 Pages 77-84 Page 31 Pages 65-70 Pages 49-54 Page 27-31 * * <i>Page 17</i> Page 79 Pages 81-87 * Page 84 Page 19 <i>Pages 4-5, 20, 22</i> Page 65 <i>Pages 10-13, 16-21</i> * <i>Pages 9-12, 13-20, 23</i>

Unifying Concept B: Science, Technology, and Society

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society influences the development of technology and its impact on culture.

N.8.B Students understand the interactions of science and society in an ever-changing world.	DSM Activities	Page Number(s) * DSM III available soon
<p>N.8.B.1 Students understand that consequences of technologies can cause resource depletion and environmental degradation, but technology can also increase resource availability, mitigate environmental degradation, and make new resources economical.</p>	<p>Electromagnetism Activity 2 Science/Tech/Soc. 1 <i>Electromagnetism Reader</i></p> <p>Erosion Activity 11 Science/Soc. Studies <i>Erosion Reader</i></p> <p>Flight and Rocketry Activity 9 Science and Health 2</p> <p>Lenses and Mirrors Activity 6 Science/Tech/Soc. 1</p> <p>Fungi – Small Wonders Activity 11 Sci./Tech/Soc., 12</p> <p>Oceans Activity 11 Science Challenge <i>Oceans Reader</i></p> <p>Pollution Act. 4 Sci./Tech/Soc., 6 Sci/Car. <i>Pollution Reader</i></p> <p>Pond Life Activity 11 Science/Tech/Soc.</p> <p>Rocks and Minerals Activity 11</p> <p>Simple Machines Activity 11 Science/Soc. Studies <i>Simple Machines Reader</i></p> <p>Solar Energy Activity 4 Science Challenge</p> <p>Weather Forecasting Activity 2 Science/Soc. Studies <i>Weather Forecasting Reader</i></p> <p>You and Your Body Activity 6 Science and Health <i>You and Your Body Reader</i></p> <p>Astronomy Activity 1 Science/Tech/Soc.</p> <p>DNA-From Genes to Proteins Activity 12</p> <p>Earth, Moon, and Sun Activity 6 Science/Tech/Soc.</p> <p>Earth Processes Activity 11 Science/Tech/Soc. <i>Earth Processes Reader</i></p> <p>Electrical Connections Activity 11 Science/Tech/Soc. 2</p> <p>Famous Scientists Activity 10</p> <p>If Shipwrecks Could Talk Activity 10 Science/Tech/Soc.</p> <p>Matter and Change</p>	<p>Page 23 <i>Page 15</i></p> <p>Page 97 <i>Page 14</i></p> <p>Page 97</p> <p>Page 45</p> <p>Pages 74, 75-79</p> <p>Page 134 <i>Page 11</i></p> <p>Page 38, 52 <i>Pages 2, 3-5, 6-8, 9-15</i></p> <p>Page 80</p> <p>Pages 85-92</p> <p>Page 89 <i>Page 12, 13</i></p> <p>Page 32</p> <p>Page 24 <i>Page 11</i></p> <p>Page 54 <i>Page 12</i></p> <p>*</p> <p>*</p> <p>Page 60</p> <p>Page 103 <i>Page 13</i></p> <p>*</p> <p>Pages 95-103</p> <p>Page 101</p>

	<p>Activity 3 Science and Health Newton's Toy Box</p> <p>Activity 8 Science/Tech/Soc. Plants in Our World</p> <p>Activity 10 Sci./Tech/Soc., 12 <i>Plants in Our World Reader</i></p>	<p>Page 35</p> <p>Page 59</p> <p>*</p> <p>Page 21</p>
<p>N.8.B.2 Students know scientific knowledge is revised through a process of incorporating new evidence gained through on-going investigation and collaborative discussion. E/S</p>	<p>Color and Light</p> <p>Activity 8 Science/Soc. Studies <i>Color and Light Reader</i></p> <p>Electromagnetism</p> <p>Activity 11 Science and Careers <i>Electromagnetism Reader</i></p> <p>Flight and Rocketry</p> <p>Activity 2 Science/Soc. Studies <i>Flight and Rocketry Reader</i></p> <p>Lenses and Mirrors</p> <p>Activity 12 Science/Soc. Studies</p> <p>Fungi – Small Wonders</p> <p>Activity 2 Science and Health</p> <p>Pollution</p> <p>Activity 11 Science/Tech/Soc. <i>Pollution Reader</i></p> <p>Pond Life</p> <p>Activity 5 Science and Health</p> <p>Rocks and Minerals</p> <p>Activity 4 Science/Soc. Studies</p> <p>Simple Machines</p> <p>Activity 1 Science/Soc. Studies <i>Simple Machines Reader</i></p> <p>Solar Energy</p> <p>Activity 11 Science and Health</p> <p>Weather Forecasting</p> <p>Activity 1 Science/Soc. Studies <i>Weather Forecasting Reader</i></p> <p>You and Your Body</p> <p>Activity 4 Science/Tech/soc. <i>You and Your Body Reader</i></p> <p>Astronomy</p> <p>Activity 2 Science/Soc. Studies</p> <p>DNA –From Genes to Proteins</p> <p>Activity 1 Science Challenge <i>DNA–Genes to Proteins Reader</i></p> <p>Earth, Moon, and Sun</p> <p>Activity 12 Science and Math <i>Earth, Moon, and Sun Reader</i></p> <p>Earth Processes</p> <p>Activity 1, 14 <i>Earth Processes Reader</i></p> <p>Electrical Connections</p> <p>Activity 4 Science/Soc. Studies</p> <p>Famous Scientists</p> <p>Activity 8</p> <p>If Shipwrecks Could Talk</p> <p>Activity 2 Sci. Challenge, Ext.</p> <p>Matter and Change</p> <p>Activity 4 Science Extension <i>Matter and Change Reader</i></p> <p>Newton's Toy Box</p> <p>Activity 5 Science/Soc. Studies</p>	<p>Page 76 <i>Page 14</i></p> <p>Page 83 <i>Page 14</i></p> <p>Page 32 <i>Pages 3- 6, 12-15</i></p> <p>Page 94</p> <p>Page 18</p> <p>Page 81 <i>Page 14, 15</i></p> <p>Page 40</p> <p>Page 40</p> <p>Page 18 <i>Page 12</i></p> <p>Page 76</p> <p>Page 18 <i>Pages 10, 11</i></p> <p>Page 39 <i>Page 12</i></p> <p>*</p> <p>*</p> <p><i>Pages 15, 21, 22</i></p> <p>Page 119 <i>Page 20</i></p> <p>Pages 13-22, 121-130 <i>Pages 4-6, 21</i></p> <p>*</p> <p>Pages 77-84</p> <p>Page 25</p> <p>Page 44 <i>Page 22</i></p>

	<i>Newton's Toy Box Reader</i> Plants in Our World Activity 1 Science Challenge 2	Page 43 Page 10
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Strand: Earth and Space Science

Unifying Concept A: Atmospheric Processes and the Water Cycle

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.8.A Students understand the relationship between the Earth's atmosphere, topography, weather and climate.	DSM Activities	Page Number(s) * DSM III available soon
E.8.A.1 Students know seasons are caused by variations in the amounts of the Sun's energy reaching Earth's surface due to the planet's axial tilt. E/S	Solar Energy Activity 6 Weather Forecasting Activity 1 Science Extension Astronomy Activity 5 Earth, Moon, and Sun Activity 9 <i>Earth, Moon, and Sun Reader</i>	Pages 39-46 Page 18 * Pages 81-92 <i>Page 11</i>
E.8.A.2 Students know how the processes involved in the water cycle affect climatic patterns. E/S	Oceans Activity 1 Science Challenge, 5 <i>Oceans Reader</i> Pollution Activity 9 Science/Tech/Soc. Weather Forecasting Activity 7 <i>Weather Forecasting Reader</i>	Pages 22, 55-64 <i>Page 10</i> Page 70 Pages 55-61 <i>Page 4</i>
E.8.A.3 Students know the properties that make water an essential component of the earth system. E/S	Erosion Activity 1, 6 Sci./Soc. Studies 1 Fungi – Small Wonders Activity 5 Oceans Activity 1, 2, 3, 5, 9, 10, 11 <i>Oceans Reader</i> Pollution Activity 9 Pond Life Activity 3 Science and Careers Solar Energy Activity 2 Weather Forecasting Activity 10 Earth, Moon, and Sun Activity 12 <i>Earth, Moon, and Sun Reader</i> Earth Processes Activity 2, 3, 4, 11, 12, 13 <i>Earth Processes Reader</i> Famous Scientists Activity 9 If Shipwrecks Could Talk Activity 1 Matter and Change Activity 2 Science Extension 3	Pages 13-20, 57 Pages 31-35 Pages 13-42. 55-64, 99-134 <i>Page 11</i> Pages 65-70 Page 25 Pages 13-19 Pages 75-80 Pages 111-119 <i>Pages 2-3</i> Pages 23-46, 97-120 <i>Pages 11-14</i> Pages 85-94 Pages 7-18 Page 19

	Plants in Our World Activity 3, 4	*
E.8.A.4 Students understand the composition of Earth's atmosphere, emphasizing the role of the atmosphere in Earth's weather and climate. I/S	<i>Oceans Reader</i> Pond Life Activity 12 Science/Tech/Soc. Solar Energy Activity 4 Science Challenge Weather Forecasting Activity 10 <i>Weather Forecasting Reader</i> <i>Earth, Moon, and Sun Reader</i>	<i>Page 10</i> Page 86 Page 32 Pages 75-80 <i>Page 2</i> <i>Pages 2-3, 22</i>
E.8.A.5 Students know the difference between local weather and regional climate. I/S	<i>Oceans Reader</i> Weather Forecasting Activity 1 Science Extension 1 <i>Weather Forecasting Reader</i>	<i>Page 10</i> Page 18 <i>Page 9</i>
E.8.A.6 Students know topography and patterns of global and local atmospheric movement influence local weather which occurs primarily in the lower atmosphere. E/S	Oceans Activity 1 Science Challenge If Shipwrecks Could Talk Activity 1	Page 22 Pages 7-18

Unifying Concept B: Solar System and Universe

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology will continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part in our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.8.B Students understand characteristics of our solar system that is part of the Milky Way galaxy.	DSM Activities	Page Number(s) * DSM III available soon
E.8.B.1 Students know the universe contains many billions of galaxies, and each galaxy contains many billions of stars. W/L	Astronomy Activity 11 <i>Earth, Moon, and Sun Reader</i>	* <i>Page 4</i>
E.8.B.2 Students know the solar system includes a great variety of planetary moons, asteroids, and comets. I/S	Astronomy Activity 6 Science Challenge Earth, Moon, and Sun Activity 3, 4 <i>Earth, Moon, and Sun Reader</i> Newton's Toy Box Activity 5 Science Connections	* Pages 29-44 <i>Pages 3, 21-23</i> Page 43
E.8.B.3 Students know characteristics of the planets in our solar system. I/S	Astronomy Activity 6 Earth, Moon, and Sun Activity 3, 4 <i>Earth, Moon, and Sun Reader</i>	* Page 29-44 <i>Pages 21-23</i>
E.8.B.4 Students know Earth is part of a solar system located within the Milky Way Galaxy. E/S	Astronomy Activity 4 Science Challenge, 11 Earth, Moon, and Sun Activity 3 Science Challenge <i>Earth, Moon, and Sun Reader</i>	* <i>Page 4</i>
E.8.B.5 Students know the Sun is many thousands of times closer to Earth than any other star, and billions of times	Astronomy Activity 1, 8 <i>Earth, Moon, and Sun Reader</i>	* <i>Page 4</i>

closer than the far end of the Milky Way Galaxy. W/L		
E.8.B.6 Students know the Sun is a medium-sized star located in the Milky Way Galaxy, part of which can be seen as a glowing band of light spanning the clear night sky. W/L	Astronomy Activity 11 <i>Earth, Moon, and Sun Reader</i>	* Page 4
E.8.B.7 Students know regular and predictable motions of Earth around the Sun and the Moon around the Earth explain such phenomena as the day, the year, phases of the Moon, and eclipses. E/S	Oceans Activity 9 Solar Energy Activity 6 Science Extension Astronomy Activity 1-5 Earth, Moon, and Sun Activity 1-2, 6-11 <i>Earth, Moon, and Sun Reader</i>	Pages 99-112 Page 46 * Page 13-27, 53-109 8-10, 11-12, 14-15, 16-19

Unifying Concept C: Earth's Composition and Structure

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.8.C Students understand that landforms result from a combination of constructive and destructive processes.	DSM Activities	Page Number(s) * DSM III available soon
E.8.C.1 Students know sedimentary rocks and fossils provide evidence for changing environments and the constancy of geologic processes. E/S	Rocks and Minerals Activity 1 <i>Rocks and Minerals Reader</i> Earth Processes Activity 1, 3, 4 <i>Earth Processes Reader</i>	Pages 13-19 Pages 10-11, 15 Pages 13-22, 29-46 Page 22
E.8.C.2 Students know rocks at Earth's surface weather, forming sediments that are buried, then compacted, heated and often recrystallized into new rock. E/S	Erosion Activity 1 <i>Erosion Reader</i> Rocks and Minerals Activity 2 <i>Rocks and Minerals Reader</i> Earth Processes Activity 3, 4, 6 <i>Earth Processes Reader</i>	Pages 13-19 Pages 5-7 Pages 21-28 Pages 10-12, 13 Pages 29-46, 55-62 Pages 11, 16--19
E.8.C.3 Students know Earth is composed of a crust (both continental and oceanic); hot convecting mantle; and dense, a metallic core. E/S	Erosion Activity 1 Science and the Arts <i>Erosion Reader</i> Rocks and Minerals Activity 1 Science and the Arts <i>Rocks and Minerals Reader</i> Earth Processes Activity 2, 5, 10, 11, 12 <i>Earth Processes Reader</i>	Page 19 Pages 2-3 Page 19 Page 2 Pages 23-28, 47-54, 89-110 Pages 2-3, 10
E.8.C.4 Students know the very slow movement of large crustal plates result in geological events. E/S	<i>Erosion Reader</i> <i>Oceans Reader</i> <i>Rocks and Minerals Reader</i> Earth Processes Activity 11, 12, 13, 14 <i>Earth Processes Reader</i>	Pages 2-3, 4 Pages 4-5 Pages 12, 13 Pages 97-130 Pages 4-10
E.8.C.5 Students know how geologic processes account	Erosion Activity 4 Science Ext. 2, 12	Pages 42, 99-104

for state and regional topography. E/S	<i>Erosion Reader</i> Earth Processes Activity 3 Science and the Arts	<i>Pages 2-3, 8, 9, 11</i> Page 37
E.8.C.6 Students know minerals have different properties and different distributions according to how they form. E/S	<i>Erosion Reader</i> Rocks and Minerals Activity 10 <i>Rocks and Minerals Reader</i> <i>Earth Processes Reader</i>	Page 6 Pages 77-84 Pages 2, 9-12 Pages 16-19
E.8.C.7 Students know the characteristics, abundances, and location of renewable and nonrenewable resources found in Nevada. E/S	Rocks and Minerals Activity 6 Science/Soc.Studies 1 Pollution Activity 5 Science/Soc.Studies 2	Page 54 Page 45
E.8.C.8 Students know soils have properties, such as color, texture, and water retention, and provide nutrients for life according to how they form. E/S	Erosion Activity 3, 7, 8 <i>Erosion Reader</i> Pollution Activity 5 Science Challenge Rocks and Minerals Activity 9 Earth Processes Activity 3 <i>Earth Processes Reader</i>	Pages 29-35, 59-74 Page 7 Page 45 Pages 69-76 Pages 29-37 Pages 19-20

Strand: Physical Science

Unifying Concept A: Matter

Matter has various states with unique properties that can be used as a basis for organization. The relationship between the properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capability to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.8.A Students understand the properties and changes of properties in matter.	DSM Activities	Page Number(s) * DSM III available soon
P.8.A.1 Students know particles are arranged differently in solids, liquids, and gases of the same substance. E/S	Rocks and Minerals Activity 7 Matter and Change Activity 2 <i>Matter and Change Reader</i>	Pages 55-59 Pages 21-28 Page 10
P.8.A.2 Students know elements can be arranged in the periodic table which shows repeating patterns that group elements with similar properties. E/S	Matter and Change Activity 4 <i>Matter and Change Reader</i>	Pages 37-44 Pages 4-5
P.8.A.3 Students know methods for separating mixtures based on the properties of the components. E/S	Erosion Activity 4 Oceans Activity 2, 3 Pollution Activity 5 Rocks and Minerals Activity 9 Matter and Change Activity 3 <i>Matter and Change Reader</i>	Pages 37-42 Pages 23-42 Pages 39-45 Pages 69-76 Pages 31-35 Pages 14-15
P.8.A.4 Students know atoms	Matter and Change	

often combine to form molecules, and that compounds form when two or more different kinds of atoms chemically bond. E/S	Activity 5, 6, 7, 8, 9 <i>Matter and Change Reader</i>	Pages 45-84 Pages 6-7
P.8.A.5 Students know mass is conserved in physical and chemical changes. E/S	Matter and Change Activity 7 <i>Matter and Change Reader</i>	Pages 63-68 Page 17
P.8.A.6 Students know matter is made up of tiny particles called atoms. E/S	Electromagnetism Activity 5 <i>Electromagnetism Reader</i> Matter and Change Activity 4 <i>Matter and Change Reader</i>	Pages 37-42 Pages 2-4 Pages 37-44 Pages 2-3
P.8.A.7 Students know the characteristics of electrons, protons, and neutrons. E/S	Electromagnetism Activity 5 <i>Electromagnetism Reader</i> Matter and Change Activity 4 <i>Matter and Change Reader</i>	Pages 37-42 Pages 2-4 Pages 37-44 Pages 2-3
P.8.A.8 Students know substances containing only one kind of atom are elements which cannot be broken into smaller pieces by normal laboratory processes. E/S	Erosion Activity 1 Science and Math Matter and Change Activity 4 <i>Matter and Change Reader</i>	Page 19 Pages 37-44 Page 4

Unifying Concept B: Forces and Motion

The laws of motion are used to describe the effects of forces on the movement of objects.

P.8.B Students understand that position and motion of an object result from the net effect of the different forces acting on it.	DSM Activities	Page Number(s) * DSM III available soon
P.8.B.1 Students know the effects of balanced and unbalanced forces on an object's motion. E/S	Electromagnetism Activity 9 <i>Electromagnetism Reader</i> Erosion Activity 5, 10 <i>Erosion Reader</i> Flight and Rocketry Activity 4 <i>Flight and Rocketry Reader</i> Oceans Activity 9 <i>Oceans Reader</i> Simple Machines Activity 1 <i>Simple Machines Reader</i> Weather Forecasting Activity 4 Earth, Moon, and Sun Activity 12 <i>Earth, Moon, and Sun Reader</i> Famous Scientists Activity 1 If Shipwrecks Could Talk Activity 4 Matter and Change Activity 2	Pages 63-68 Page 6 Pages 43-49, 83-89 Pages 2-4, 8-11, 13 Pages 45-54 Pages 3, 4, 7 Pages 99-111 Page 9 Pages 13-18 Pages 2, 3 Pages 33-40 Pages 111-119 Pages 5, 16-17 Pages 11-19 Pages 35-45 Pages 21-27

	Newton's Toy Box Activity 1, 2, 3, 11, 12 <i>Newton's Toy Box Reader</i>	Pages 13-31, 73-83 <i>Pages 4-5</i>
P.8.B.2 Students know electric currents can produce magnetic forces and magnets can cause electric currents. E/S	Electromagnetism Activity 5, 6 <i>Electromagnetism Reader</i> Electrical Connections Activity 4, 5	Pages 37-48 <i>Pages 8-9, 10-12</i> *
P.8.B.3 Students know every object exerts gravitational force on every other object, and the magnitude of this force depends on the mass of the objects and their distance from one another. I/S	<i>Erosion Reader</i> Flight and Rocketry Activity 2 Oceans Activity 9 <i>Oceans Reader</i> Earth, Moon, and Sun Activity 12 <i>Earth, Moon, and Sun Reader</i> Newton's Toy Box Activity 3 <i>Newton's Toy Box Reader</i>	<i>Page 11</i> Pages 23-32 Pages 99-111 <i>Page 9</i> Pages 111-119 <i>Page 5</i> Pages 25-31 <i>Pages 4, 8</i>

Unifying Concept C: Energy

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. In all energy transfers, the overall effect is that the energy is spread out uniformly.

P.8.C Students understand transfer of energy.	DSM Activities	Page Number(s) * DSM III available soon
P.8.C.1 Students know visible light is a narrow band within the electromagnetic spectrum. I/S	Color and Light Activity 1 <i>Color and Light Reader</i> <i>Earth, Moon, and Sun Reader</i>	Pages 13-18 <i>Pages 8-9, 14</i> <i>Page 7</i>
P.8.C.2 Students know vibrations (e.g., sounds, earthquakes) move at different speeds in different materials, have different wavelengths, and set up wave-like disturbances that spread away from the source uniformly. E/S	<i>Erosion Reader</i> Oceans Activity 4 Earth Processes Activity 8, 9 <i>Earth Processes Reader</i> Famous Scientists Activity 6 If Shipwrecks Could Talk Activity 2 Science/Tech./Soc.	<i>Page 4</i> Pages 43-54 Pages 71-88 <i>Page 9</i> Pages 55-64 <i>Page 25</i>
P.8.C.3 Students know physical, chemical, and nuclear changes involve a transfer of energy. E/S	Electromagnetism Activity 9 Science Extension Erosion Activity 10 Flight and Rocketry Activity 9, 12 Oceans Activity 9 Science/Tech/Society <i>Oceans Reader</i> <i>Pollution Reader</i> <i>Simple Machines Reader</i> Solar Energy Activity 2 <i>DNA-From Genes to Proteins</i> Astronomy Activity 5 Earth, Moon, and Sun Activity 9 <i>Earth, Moon, and Sun Reader</i>	Page 68 Pages 83-89 Pages 91-98, 121-130 Page 111 <i>Pages 7, 11</i> <i>Page 15</i> <i>Page 3</i> Pages 13-19 <i>Pages 10-11</i> * Pages 81-92 <i>Page 6</i>

	Earth Processes Activity 8, 9 <i>Earth Processes Reader</i> Electrical Connections Activity 2, 7 Famous Scientists Activity 5, 8 Matter and Change Activity 7 Science Challenge <i>Matter and Change Reader</i> Newton's Toy Box Activity 8, 10 <i>Newton's Toy Box Reader</i> Plants in Our World Activity 10 <i>Plants in Our World Reader</i>	Pages 71-88 Page 9 * Pages 45-54, 77-84 Page 68 Pages 11-12, 18 Pages 55-59, 67-72 Page 14 * Page 3-4
P.8.C.4 Students know energy cannot be created or destroyed, in a chemical or physical reaction, but only changed from one form to another. E/S	Newton's Toy Box Activity 8, 10	Pages 55-59, 67-72
P.8.C.5 Students know heat energy flows from warmer materials or regions to cooler ones through conduction, convection, and radiation. E/S	<i>Erosion Reader</i> Oceans Activity 8 <i>Oceans Reader</i> Solar Energy Activity 11 Weather Forecasting Activity 9 Earth Processes Activity 12 Science Challenge <i>Earth Processes Reader</i> <i>Matter and Change Reader</i>	Pages 2-3 Pages 89-98 Pages 8, 10 Pages 71-76 Pages 69-74 Page 110 Page 3 Page 11
P.8.C.6 Students know electrical circuits provide a means of transferring electrical energy to produce heat, light, sound, and chemical changes. I/S	Electromagnetism Activity 9 <i>Electromagnetism Reader</i> Solar Energy Activity 10 Famous Scientists Activity 5 Electrical Connections Activity 2, 7 Matter and Change Activity 6	Pages 63-68 10-13 Pages 65-70 Pages 45-54 * Pages 53-61

Strand: Life Sciences

Unifying Concept A: Heredity

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.8.A Students understand the role of genetic information in the continuation of a species.	DSM Activities	Page Number(s) * DSM III available soon
L.8.A.1 Students know heredity is the passage of genetic instructions from one generation to the next	Pond Life Activity 5 DNA -From Genes to Proteins Activity 5	Pages 35-40 *

generation. E/S	<i>DNA -Genes to Proteins Reader</i>	<i>Page 15</i>
L.8.A.2 Students know changes in genes of eggs and sperm can cause changes in inherited characteristics. E/S	DNA -From Genes to Proteins Activity 5 Science Extension	*
L.8.A.3 Students know organisms can be bred for specific characteristics. I/L	Fungi – Small Wonders Activity 11 Science/Tech./Soc. 2 Pollution Activity 6 Science and Careers DNA -From Genes to Proteins Activity 12 <i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 12 Science/Tech./Soc. 2	Page 74 Page 52 * <i>Pages 15-19, 20</i> *
L.8.A.4 Students know some characteristics of an organism are the result of a combination of interaction with the environment and genetic information. E/S	Fungi – Small Wonders Activity 6, 7 Oceans Activity 10 Pollution Activity 10 Pond Life Activity 5, 10 DNA -From Genes to Proteins Activity 10 <i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 12 Science/Tech./Soc. 2	Pages 37-49 Pages 113-124 Pages 71-76 Pages 35-40, 69-74 * <i>Page 20</i> *

Unifying Concept B: Structure of Life

All living things are composed of cells. Cells range from very simple to very complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.8.B Students understand that living things are composed of cells, which are specialized in multicellular organisms to perform a variety of life functions.	DSM Activities	Page Number(s) * DSM III available soon
L.8.B.1 Students know all organisms are composed of cells, which are the fundamental units of life. E/S	<i>You and Your Body Reader</i> DNA -From Genes to Proteins Activity 3 <i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 1 <i>Plants in Our World Reader</i>	<i>Page 2</i> * <i>Page 2</i> * <i>Page 2</i>
L.8.B.2 Students know cells grow, divide, and take in nutrients which they use to provide energy for cell functions. E/S	Fungi – Small Wonders Activity 5 <i>You and Your Body Reader</i> DNA -From Genes to Proteins Activity 4, 11 <i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 1	Pages 31-35 <i>Page 2</i> * <i>Pages 8-14</i> *
L.8.B.3 Students know some organisms are made of just one cell and that multicellular organisms can consist of thousands to millions of cells	Fungi – Small Wonders Activity 4 <i>You and Your Body Reader</i> DNA -From Genes to Proteins Activity 3	Pages 25-29 <i>Pages 2-3</i> *

working together. E/S	<i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 1, 2	<i>Pages 3, 5, 6-7</i> *
L.8.B.4 Students know cells combine to form tissues that combine to form organs and organ systems that are specialized to perform life functions. E/S	<i>You and Your Body Reader</i> <i>DNA -Genes to Proteins Reader</i>	<i>Page 3</i> <i>Page 3</i>
L.8.B.5 Students know disease can result from defects in body systems or from damage caused by infection. E/S	Fungi – Small Wonders Activity 10 Science and Health <i>Pollution Reader</i> Pond Life Activity 7 Science and Health <i>You and Your Body Reader</i> DNA -From Genes to Proteins Activity 12	<i>Page 68</i> <i>Page 14</i> <i>Page 55</i> <i>Pages 3, 11</i> *

Unifying Concept C: Organisms and Their Environment

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.8.C Students understand how living and non-living components of ecosystems interact.	DSM Activities	Page Number(s) * DSM III available soon
L.8.C.1 Students know how matter and energy are transferred through food webs in an ecosystem. E/S	Oceans Activity 11 Science Extension 2 <i>Pollution Reader</i> Pond Life Activity 11 Solar Energy Activity 1 Plants in Our World Activity 8	<i>Page 134</i> <i>Pages 11, 14</i> <i>Pages 75-80</i> <i>Pages 7-11</i> *
L.8.C.2 Students know how to characterize organisms in any ecosystem by their functions. E/S	Fungi – Small Wonders Activity 5 Science Extension 2 Pond Life Activity 11 DNA -From Genes to Proteins Activity 11 Plants in Our World Activity 8 <i>Plants in Our World Reader</i>	<i>Page 35</i> <i>Pages 75-80</i> * * <i>Pages 9, 13</i>
L.8.C.3 Students will evaluate how changes in environments can be beneficial or harmful. E/S	Erosion Activity 6 Science/Soc. Stud. 2 Fungi – Small Wonders Activity 7 Oceans Activity 11 Science Challenge Pollution Activity 6, 10 <i>Pollution Reader</i> Pond Life Activity 10 DNA -From Genes to Proteins Activity 12 Science Extension	<i>Page 57</i> <i>Pages 45-49</i> <i>Page 134</i> <i>Pages 47-52, 71-76</i> <i>Pages 9, 11, 13, 14, 15</i> <i>Pages 69-74</i> *

	Plants in Our World Activity 10 Science/Tech./Soc.	*
L.8.C.4 Students know inter-related factors affect the number and type of organisms an ecosystem can support. E/S	Fungi – Small Wonders Activity 6, 11 Oceans Activity 11 <i>Oceans Reader</i> Pond Life Activity 11 Plants in Our World Activity 10 Science Extension	Pages 37-44, 69-74 Pages 125-134 <i>Pages 12-13</i> Pages 75-80 *

Unifying Concept D: Diversity of Life

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.8.D Students understand that life forms change over time, contributing to the variety of organisms found on the Earth.	DSM Activities	Page Number(s) * DSM III available soon
L.8.D.1 Students know species can be identified and classified based upon their characteristics. (8.8.6) E/S	Fungi – Small Wonders Activity 1, 2, 3, 4 Oceans Activity 11, 12 <i>Oceans Reader</i> Pond Life Activity 6 DNA -From Genes to Proteins Activity 11 <i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 1, 8 <i>Plants in Our World Reader</i>	Pages 7-29 Pages 125-142 <i>Pages 12-13</i> Pages 41-47 * <i>Pages 5, 6-7, 14</i> * <i>Pages 2, 9-10, 11-12, 13-20</i>
L.8.D.2 Students know fossils provide evidence of how life and environmental conditions have changed throughout geologic time. E/S	Rocks and Minerals Activity 1 <i>Rocks and Minerals Reader</i> Earth Processes Activity 2 Science Challenge <i>Earth Processes Reader</i>	Pages 13-20 <i>Page 15</i> Page 28 <i>Page 22</i>
L.8.D.3 Students know an organism's behavior is based on both experience and on the species' evolutionary history. E/S	Oceans Activity 11 Science Extension 1 Pond Life Activity 9 You and Your Body Activity 3 <i>You and Your Body Reader</i> DNA –From Genes to Proteins Activity 12 Connections <i>DNA -Genes to Proteins Reader</i> Plants in Our World Activity 1 Science Challenge <i>Plants in Our World Reader</i>	Page 134 Pages 63-67 Pages 27-32 <i>Page 14</i> * <i>Pages 19-20</i> * <i>Pages 5-6</i>