

# DSM II™

## Delta Science Modules II

Correlation With

**New York City**  
Science Performance Standards



# A Correlation of the New York City Science Performance Standards to the Delta Science Modules II

The following correlation of the New York City Science Performance Standards to Delta Science Modules II is to show representative examples of investigations from DSM II that address the Performance Standards. A citation does not reflect all of the investigations from DSM II's that might address a particular standard.

## Elementary School Science

### S1. Physical Sciences Concepts

#### S1a. Demonstrates understanding of properties of objects and materials.

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of properties of objects and materials, such as similarities and differences in the size, weight, and color of objects; the ability of materials to react with other substances; and different states of materials.	<u>Investigating Water</u>	Activity 1, Pages 7-12; Activity 4, Pages 27-32 ; Activity 8, Pages 53-60; Activity 9, Pages 61-70;
	<u>Length and Capacity</u>	In this module, (12 activities) students explore the properties associated with the measurement of matter including length, width, height, volume and estimation. Metric measurement is introduced and applied.
	<u>Properties</u>	In this module, (13 activities) students are introduced to and explore the concept of properties. These include size, shape, color, weight, texture, solids, liquids, gases, sink/float and magnetism.
	<u>States of Matter</u>	Activity 1, Pages 7-12; Activity 2, Pages 13-20; Activity 3, Pages 21-30; Activity 8, Pages 61-68; Activity 9, Pages 69-74; Activity 10, Pages 75-82,
	<u>Sink or Float</u>	Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 3, Pages 23-28.
	<u>Soil Science</u>	Activity 1, Pages 7-12;

	<p><b><u>Using Your Senses</u></b></p> <p><b><u>Measuring</u></b></p> <p><b><u>Powders and Crystals</u></b></p> <p><b><u>Magnets</u></b></p>	<p>In this module (12 activities) students observe, describe and compare material objects and evidence using their senses including sight, sound, touch, smell and taste.</p> <p>In this module, (12 activities) students explore the properties associated with the measurement of matter including length, width, height, area, capacity, volume and temperature. Metric measurement is introduced and applied.</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-20; Activity 3, Pages 21-26; Activity 4, Pages 27-34;</p> <p>Activity 4, , Pages 23-28</p>
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**S1b. Demonstrates understanding of position and motion of objects.**

<b><i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Produce evidence that demonstrates understanding of position and motion of objects, such as how the motion of an object can be described by tracing and measuring its position over time; and how sound is produced by vibrating objects.	<p><b><u>Electrical Circuits</u></b></p> <p><b><u>Finding the Moon</u></b></p> <p><b><u>Force and Motion</u></b></p> <p><b><u>Solar System</u></b></p> <p><b><u>Sunshine and Shadows</u></b></p> <p><b><u>Sound</u></b></p>	<p>Activity 3, Pages 21-28; Activity 4, Pages 29-36;</p> <p>Activity 5, Pages 39-46</p> <p>Activity 3, Pages 27-36; Activity 7, Pages 61-68;</p> <p>Activity 1, Pages 7-14; Activity 2, Pages 15-20; Activity 8, Pages 59-66;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-20; Activity 3, Pages 21-26; Activity 4, Pages 27-36; Activity 5, Pages 37-42;</p> <p>In this module, (12 activities) students investigate sound by observing, feeling and hearing the vibration of objects to discover how sound is produced. They further explore the properties of sound including pitch and volume.</p>

**S1c. Demonstrates understanding of light, heat, electricity, and magnetism.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade four,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of light, heat, electricity, and magnetism, such as the variation of heat and temperature; how light travels in a straight line until it strikes an object or how electric circuits work.	<u><b>Sunshine and Shadows</b></u>	Activity 1, Pages 7-12; Activity 2, Pages 13-20; Activity 3, Pages 21-26; Activity 11, Pages 75-80;
	<u><b>Investigating Water</b></u>	Activity 9, Pages 61-70; Activity 10, Pages 71-78; Activity 11, Pages 79-84;
	<u><b>States of Matter</b></u>	Activity 4, Pages 31-36; Activity 5, Pages 37-46; Activity 6, Pages 47-52; Activity 8; Activity 9, Pages 69-74; Activity 10, Pages 75-82;
	<u><b>Using Your Senses</b></u>	Activity 5, Pages 37-44; Activity 6, Pages 45-52; Activity 7, Pages 53-58;
	<u><b>Electric Circuits</b></u>	Activity 1, Pages 7-12; Activity 2, Pages 13-20; Activity 3, Pages 21-28; Activity 4, Pages 29-36; Activity 5, Pages 37-42;
	<u><b>Water Cycle</b></u>	Activity 4, Pages 29-34; Activity 5, Pages 35-42;
	<u><b>Weather Instruments</b></u>	Activity 1, Pages 7-14, Activity Sheet 1; Activity 6, Pages 41-46; Activity 7, Pages 47-54;

**S2. Life Sciences Concepts**

**S2a. Demonstrates understanding of properties of characteristics of organisms.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade four,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of characteristics of organisms, such as survival and environmental support; the relationship between structure and function; and variations in behavior.	<u><b>Butterflies and Moths</b></u>	Activity 10, Pages 75-82; Activity 12, Pages 91-96;
	<u><b>Classroom Plants</b></u>	Activity 1, Pages 7-14; Activity 2, Pages 15-20; Activity 10, Pages 71-78;
	<u><b>Insect Life</b></u>	Activity 1, Pages 7-14; Activity 5, Pages 35-40; Activity 6, Pages 41-46; Activity 9, Pages 61-66;
	<u><b>Observing an Aquarium</b></u>	Activity 2, Pages 13-20, Activity Sheet 2; Activity 3, Pages 21-28;

	<p><b><u>Plant and Animal Life Cycles</u></b></p> <p><b><u>Dinosaur Classification</u></b></p> <p><b><u>Animal Behavior</u></b></p> <p><b><u>From Seed to Plant</u></b></p>	<p>Activity 4, Pages 29-36; Activity 5, Pages 37-44; Activity 6, Pages 45-54; Activity 8, Pages 65-72; Activity 9, Pages 73-80;</p> <p>Activity 1, Pages 7-14; Activity 11, Pages 85-90;</p> <p>Activity 9, Pages 59-66;</p> <p>This module (12 activities) is designed to teach students experimental design and to help them learn about mealworm behavior in response to varying conditions such as odor, color, food air water heat and light.</p> <p>In this module (14 activities) students explore the life cycle of plants of a variety (10) of plants. Throughout the module, they also study structure and function of plant parts.</p>
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**S2b. Demonstrates understanding of life cycles of organisms.**

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of life cycles of organisms, such as how inheritance and environment determine the characteristics of an organism and that all plants and animals have life cycles.	<p><b><u>Observing an Aquarium</u></b></p> <p><b><u>Butterflies and Moths</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p> <p><b><u>Plant and Animal Life Cycles</u></b></p> <p><b><u>From Seed to Plant</u></b></p>	<p>Activity 10, Pages 81-90;</p> <p>This module is devoted to the study of the life cycles of butterflies (i.e. Painted Lady) and moths (Wax). Students observe, record, and investigate the stages of metamorphosis.</p> <p>Activity 2, Pages 15-20; Activity 3, Pages 21-28; Activity 4, Pages 29-36; Activity 9, Pages 65-70; Activity 10, Pages 71-78;</p> <p>Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 5, Pages 37-42, Activity Sheet 5;</p> <p>In this module (12 activities) students observe, record and investigate the developmental changes of peas (plant) and fruit flies (animal) as they complete their life cycles.</p>

		In this module (14 activities) students explore the life cycle of plants of a variety (10) of plants. Throughout the module, they also study structure and function of plant parts.
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**S2c. Demonstrates understanding of organisms and environments.**

<b>SCIENCE STANDARD</b> <i>By the end of grade four, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
Produce evidence that demonstrates understanding of organisms and environments, such as interdependence of animals and plants in an ecosystem; and populations and their effects on the environment.	<p><b><u>From Seed to Plant</u></b></p> <p><b><u>Observing an Aquarium</u></b></p> <p><b><u>Butterflies and Moths</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p> <p><b><u>Dinosaur Classification</u></b></p> <p><b><u>Food Chains and Webs</u></b></p> <p><b><u>Insect Life</u></b></p> <p><b><u>Soil Science</u></b></p>	<p>Activity 11, Pages 75-80;</p> <p>Activity 2, Pages 13-20; Activity 3, Pages 21-28; Activity 4, Pages 29-36; Activity 5, Pages 37-44; Activity 11, Pages 91-98; Activity 12, Pages 99-106;</p> <p>Activity 3, Pages 23-30; Activity 4, Pages 31-36; Activity 8, Pages 61-66;</p> <p>Activity 1, Pages 7-14; Activity 11, Pages 79-86;</p> <p>Activity 3, Pages 23-28; Activity 8, Pages 61-66; Activity 9, Pages 67-74; Activity 10, Pages 75-82; Activity 11, Pages 83-90; Activity 12, Pages 91-98;</p> <p>Activity 8, Pages 53-58;</p> <p>This module is designed for students to investigate food chains and webs by observing the interaction of plants and animals (crickets, chameleons, earthworms). They classify the organisms as primary, secondary or tertiary consumers or decomposers, based on what it eats.</p> <p>Activity 8, Pages 55-60; Activity 10, Pages 67-72; Activity 11, Pages 73-78;</p> <p>Activity 8, Pages 59-68; Activity 9, Pages 69-76; Activity 10, Pages 77-84</p>

**S2d. Demonstrates understanding of properties of characteristics of organisms.**

<b>SCIENCE STANDARD</b> <i>By the end of grade four, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
Produce evidence that demonstrates understanding of change over time, such as evolution and fossil evidence depicting the great diversity of organisms developed over geologic history.	<u><b>Dinosaur Classification</b></u>	Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 8, Pages 53-58; Activity 9, Pages 59-66; Activity 10, Pages 67-74;
	<u><b>Earth Movements</b></u>	Activity 3, Pages 19-26;

**S3. Earth and Space Sciences Concepts**

**S3a. Demonstrates understanding of properties of Earth materials.**

<b>SCIENCE STANDARD</b> <i>By the end of grade four, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
Produce evidence that demonstrates understanding of Earth materials such as water and gases; and the properties of rocks and soils, such as texture, color and the ability to retain water.	<u><b>Investigating Water</b></u>	Activity 1, Pages 7-12 Activity 9, Pages 61-70; Activity 10, Pages 71-78; Activity 11, Pages 79-84;
	<u><b>Properties</b></u>	Activity 9, Pages 61-68;
	<u><b>Amazing Air</b></u>	Activity 1, Pages 7-14; Activity 2, Pages 15-24; Activity 3, Pages 25-34; Activity 6, Pages 51-58;
	<u><b>Soil Science</b></u>	Activity 1, Pages 7-12; Activity 3, Pages 21-28; Activity 4, Pages 29-36; Activity 5, Pages 37-42; Activity 7, Pages 51-58
	<u><b>Water Cycle</b></u>	Activity 1, Pages 7-16; Activity 2, Pages 17-22; Activity 3, Pages 23-28; Activity 4, Pages 29-34; Activity 5, Pages 35-42; Activity 6, Pages 43-50; Activity 7, Pages 51-58; Activity 8, Pages 59-66; Activity 9, Pages 67-72; Activity 12, Pages 87-94; Activity 13, Pages 95-102;

**S3b. Demonstrates understanding of objects in the sky.**

<b>SCIENCE STANDARD</b> <i>By the end of grade four, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
Produce evidence that demonstrates understanding of objects in the sky, such as Sun, Moon, planets and other objects that can be observed and	<u><b>From Seed to Plant</b></u>	Activity 11, Pages 75-80;
	<u><b>Finding the Moon</b></u>	Activity 1, Pages 7-14; Activity 2, Pages 15-22 Activity 3, Pages 23-30; Activity 4, Pages 31-38;

<p>described; and the importance of the Sun to provide the light and heat necessary for survival.</p>	<p><b><u>Sunshine and Shadows</u></b></p> <p><b><u>Solar System</u></b></p>	<p>Activity 5, Pages 39-46 Activity 9, Pages 67-74; Activity 10, Pages 75-82; Activity 11, Pages 83-88;</p> <p>Activity 9, Pages 67-74; Activity 10, Pages 75-82; Activity 11, Pages 83-88;</p> <p>In this module (12 activities) students gain perspective on the physical relationships between objects in the solar system including the sun, planets and other objects in the sky. Relative distance and models are two major strategies for learning.</p>
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**S3c. Demonstrates understanding of changes in earth and sky.**

<p><b>SCIENCE STANDARD</b> <i>By the end of grade four, students know and are able to:</i></p>	<p><b>DELTA SCIENCE MODULE II</b></p>	<p><b>PAGE NUMBER(S)</b></p>
<p>Produce evidence that demonstrates understanding of changes in Earth and sky, such as changes caused by weathering, volcanism, and earthquakes; and the patterns of movement of objects in the sky.</p>	<p><b><u>Earth Movements</u></b></p> <p><b><u>Finding the Moon</u></b></p> <p><b><u>Sunshine and Shadows</u></b></p> <p><b><u>Soil Science</u></b></p> <p><b><u>Solar System</u></b></p> <p><b><u>Water Cycle</u></b></p> <p><b><u>Weather Instruments</u></b></p>	<p>Activity 5, Pages 35-42; Activity 6, Pages 43-50; Activity 7, Pages 41-56; Activity 8, Pages 57-64; Activity 9, Pages 65-70;</p> <p>Activity 3, Pages 23-30; Activity 4, Pages 31-38; Activity 5, Pages 39-46; Activity 9, Pages 67-74; Activity 10, Pages 75-82;</p> <p>Activity 4, Pages 27-36; Activity 5, Pages 37-42; Activity 6, Pages 43-50; Activity 7, Pages 51-56;</p> <p>Activity 5, Pages 37-42; Activity 6, Pages 43-50; Activity 12, Pages 93-100;</p> <p>Activity 9, Pages 67-74; Activity 12, Pages 93-102;</p> <p>Activity 5, Pages 35-42; Activity 6, Pages 43-50; Activity 8, Pages 59-66; Activity 9, Pages 67-72; Activity 10, Pages 73-78;</p> <p>Activity 3, Pages 21-26; Activity 6, Pages 41-46; Activity 7, Pages 47-54; Activity 8, Pages 55-62; Activity 9, Pages 63-68; Activity 10, Pages 69-76; Activity 11, Pages 77-84; Activity 4, Pages 27-32</p>

	<u>Weather Watching</u>	Activity 3, Pages 23-30; Activity 4, Pages 31-38; Activity 5, Pages 39-44; Activity 6, Pages 45-52; Activity 7, Pages 53-60; Activity 8, Pages 61-68; Activity 9, Pages 69-78; Activity 10, Pages 79-92; Activity 11, Pages 93-100;
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## S4. Scientific Connections and Applications

### S4a. Demonstrates understanding of big ideas and unifying concepts.

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of big ideas and unifying concepts, such as order and organization; models, form and function; change and constancy; and cause and effect.	<p>In every Delta Science Module there is evidence of the application of unifying concepts. The following is only a representation of the number and themes.</p> <p><u>Amazing Air</u></p> <p><u>Animal Behavior</u></p> <p><u>Classroom Plants</u></p> <p><u>Dinosaur Classification</u></p> <p><u>Earth Movements</u></p> <p><u>Finding the Moon</u></p> <p><u>Force and Motion</u></p> <p><u>From Seed to Plant</u></p> <p><u>Observing an Aquarium</u></p> <p><u>Plant and Animal Life Cycles</u></p> <p><u>Plant and Animal Populations</u></p> <p><u>Sink or Float</u></p> <p><u>Soil Science</u></p> <p><u>Solar System</u></p> <p><u>States of Matter</u></p> <p><u>Sunshine and Shadows</u></p> <p><u>Using Your Senses</u></p>	<p>Activity 8, Pages 69-76;</p> <p>Activity 4, Pages 25-30</p> <p>Activity 7, Pages 53-58</p> <p>Activity 10, Pages 67-74</p> <p>Activity 9, Pages 65-70;</p> <p>Activity 7, Pages 53-60;</p> <p>Activity 2, Pages 19-26;</p> <p>Activity 3, Pages 23-28;</p> <p>Activity 4, Pages 29-36;</p> <p>Activity 12, Pages 91-98;</p> <p>Activity 9, Pages 67-74;</p> <p>Activity 7, Pages 55-60;</p> <p>Activity 6, Pages 43-50;</p> <p>Activity 9, Pages 67-74;</p> <p>Activity 8, Pages 61-68</p> <p>Activity 3, Pages 21-26;</p> <p>Activity 5, Pages 37-44;</p>

	<u>Water Cycle</u>	Activity 9, Pages 67-72;
	<u>Weather Instruments</u>	Activity 10, Pages 69-76;
	<u>Weather Watching</u>	Activity 9, Pages 69-78;

**S4b. Demonstrates understanding of the designed world.**

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of the designed world, such as development of agricultural techniques; and the viability of technological designs.	<u>Amazing Air</u>	Activity 12, Pages 101-108;
	<u>Simple Machines</u>	Activity 12, Pages 109-116;
	<u>Sink or Float</u>	Activity 12, Pages 91-98;
	<u>Soil Science</u>	Activity 12, Pages 93-100;
	<u>Electrical Circuits</u>	Activity 12, Pages 81-86;

**S4c. Demonstrates understanding of personal health.**

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of personal health, such as nutrition, substance abuse, and exercise; germs and toxic substances; personal and environmental safety.		Personal safety is an important factor as students investigate with materials that may present a risk if used improperly. Precautionary information is presented in both the Teacher Manual (shaded boxes) and on student Activity Sheets, where appropriate.

**S4d. Demonstrates understanding of science as a human endeavor.**

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of science as a human endeavor, such as communication, cooperation, and diverse input in scientific research; and the importance of reason, intellectual honesty, and skepticism.		In all modules, students work in cooperative groups and employ the nature of science activity, which involves communication, reasoning, skepticism and cooperative efforts.

## S5. Scientific Connections and Applications

**S5a. Asks questions about natural phenomena; objects and organisms; and events and discoveries.**

<p><b>SCIENCE STANDARD</b>  <i>By the end of grade four,  students know and are able to:</i></p>	<p><b>DELTA SCIENCE MODULE II</b></p>	<p><b>PAGE NUMBER(S)</b></p>
<p>Asks questions about natural phenomena; objects and organisms; and events and discoveries.</p>	<p><b><u>From Seed to Plant</u></b></p> <p><b><u>Observing an Aquarium</u></b></p> <p><b><u>Finding the Moon</u></b></p> <p><b><u>Sunshine and Shadows</u></b></p> <p><b><u>Investigating Water</u></b></p> <p><b><u>Properties</u></b></p> <p><b><u>Amazing Air</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Force and Motion</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p> <p><b><u>Sink or Float</u></b></p> <p><b><u>Soil Science</u></b></p>	<p>In the DSM II Science modules, activities are designed around inquiry and students' questions. Indicators of inquiry in the lesson objectives are in the terms "discover" and "predict". The following are examples:  Activity 12, Pages 81-86;</p> <p>Activity 2, Pages 13-20; Activity 4, Pages 29-36;</p> <p>Activity 1, Pages 7-14; Activity 3, Pages 23-30; Activity 7, Pages 53-60; Activity 10, Pages 75-82; Activity 11, Pages 83-88;</p> <p>Activity 3, Pages 21-26; Activity 7, Pages 51-56; Activity 10, Pages 69-74; Activity 11;</p> <p>Activity 2, Pages 13-18; Activity 5, (Pages 33-38) through Activity 7, (Pages 47-52; Activity 9, Pages 61-70; Activity 10, Pages 71-78;</p> <p>Activity 6, Pages 41-46; Activity 10, Pages 69-74; Activity 11, Pages 75-80; Activity 12, Pages 81-88;</p> <p>Activity 3, Pages 25-34; Activity 9, Pages 77-86;</p> <p>Activity 6, Pages 43-52; Activity 9, Pages 65-70;</p> <p>Activity 3, Pages 27-36;</p> <p>Activity 7, Pages 43-60; Activity 10, Pages 75-82;</p> <p>Activity 1, Pages 7-14; Activity 5, Pages 37-46;</p> <p>Activity 7, Pages 51-58</p>

**S5b. Uses concepts from Science Standards 1 to 4 to explain a variety of observations and phenomena.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade four,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Use concepts from Science Standards 1 to 4 to explain a variety of observations and phenomena.		Delta Science Module II Program is an interactive science program where students use materials and equipment to explore science phenomena. Lessons are accompanied by <i>Student Activity Sheets</i> on which students respond to questions related to observations, predictions, inferences and explanations. The data-collecting format of many contains tables and graphs.

**S5c. Uses evidence from reliable sources to construct explanations.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade four,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Use evidence from reliable sources to construct explanations..	<p><u><b>Weather Watching</b></u></p> <p><u><b>Dinosaur Classification</b></u></p> <p><u><b>Insect Life</b></u></p>	<p>In the Delta Science Program, sources of explanations most often come from students' observations and first-hand experiences. On occasion, students are referred to other resources. Some examples of the use of other resources are in the following lessons:</p> <p>Activity 12, Pages 101-108;</p> <p>Activity 12, Pages 81-86;</p> <p>Activity 13, Pages 85-90;</p>

**S5d. Evaluates different points of view using relevant experience, observations, and knowledge; and distinguishes between fact and opinion.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade four,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Evaluate different points of view using relevant experiences, observations, and knowledge; and distinguishes between fact and opinion.		The Teacher Guide of the Delta Science Module II Program offers carefully guided questions and possible responses. This design encourages the discovery of scientific phenomena and leads students to differentiate between fact and opinion and avoid students' misconceptions. Some

	<p><b><u>Finding the Moon</u></b></p> <p><b><u>Investigating Water</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p> <p><b><u>Sink or Float</u></b></p> <p><b><u>States of Matter</u></b></p> <p><b><u>Using Your Senses</u></b></p> <p><b><u>Electrical Circuits</u></b></p> <p><b><u>Magnets</u></b></p>	<p>examples include:</p> <p>Activity 12, Pages 89-95;</p> <p>Activity 11, Pages 79-84;</p> <p>Activity 5, Pages 37-42;</p> <p>Activity 1, Pages 7-14;</p> <p>Activity 1, Pages 7-14;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-20; Activity 3, Pages 21-30;</p> <p>Activity 4, Pages 29-36;</p> <p>Activity 9, Pages 63-68</p> <p>Activity 2, Pages 13-18; Activity 3, Pages 19-22</p>
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**S5e. Identifies problems; proposes and implements solutions; and evaluates the accuracy, design, and outcomes of investigations.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade four, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Identify problems; propose and implement solutions; and evaluate the accuracy design, and outcomes of investigations.	<p><b><u>Amazing Air</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Plant and Animal Population</u></b></p> <p><b><u>Sink or Float</u></b></p> <p><b><u>States of Matter</u></b></p> <p><b><u>Using Your Senses</u></b></p> <p><b><u>Animal Behavior</u></b></p>	<p>Activity 3, Pages 25-34; Activity 12, Pages 101-108;</p> <p>Activity 5, Pages 37-42;</p> <p>Activity 1, Pages 7-14; Activity 9, Pages 67-74;</p> <p>Activity 2, Pages 15-22; Activity 3, Pages 23-28; Activity 6, Pages 47-54; Activity 9, Pages 69-74; Activity 12, Pages 91-98;</p> <p>Activity 4, Pages 31-36; Activity 5, Pages 37-46;</p> <p>Activity 9, Pages 67-72;</p> <p>This module is designed around teaching students to design experiments to learn about mealworm behavior. They learn about asking questions and pursuing answers in controlled experiments.</p>

	<b><u>Food Chains and Webs</u></b>	Activity 3, Pages 21-26;
	<b><u>Insect Life</u></b>	Activity 8, Pages 55-60;
	<b><u>Powders and Crystals</u></b>	Activity 5, Pages 35-42; Activity 6, Pages 43-48; Activity 7, Pages 49-54; Activity 8, Pages 55-62; Activity 9, Pages 63-70;
	<b><u>Water Cycle</u></b>	Activity 12, Pages 87-94;
	<b><u>Weather Instruments</u></b>	Activity 7, Pages 47-54;

### **S5f. Works individually and in teams to collect and share information and ideas.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade four, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Work individually and in a team to collect and share information and ideas.		In all DSM II's recommended for Grades 4, students work individually, with a partner or in groups of four to investigate and discover science concepts. This is most obvious in the "Materials" preparation of the lesson, to gather materials every student, groups of two or four.

## **S6. Scientific Tools and Technologies**

### **S6a. Uses technology and tools to gather data and extend the senses.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade four, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Use technology and tools (such as rulers, computers, balances, thermometers, watches, magnifiers, and microscopes) to gather data and extend the senses.		"Hands-on Science" is the nature of Delta Science Modules thus, the success of the lessons is dependent on developmentally-appropriate data-gathering tools. Examples of how these are used can be found in the following references:
	<b><u>From Seed to Plant</u></b>	Activity 8, Pages 57-62, Activity Sheet 8;
	<b><u>Investigating Water</u></b>	Activity 4, Pages 27-32, Activity Sheet 4;
	<b><u>Sunshine and Shadows</u></b>	Activity 10, Pages 69-74, Activity Sheet 10;
	<b><u>Amazing Air</u></b>	Activity 4, Pages 35-42; Activity 4, Pages 35-42; Activity 5, Pages

	<p><b><u>Butterflies and Moths</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Force and Motion</u></b></p> <p><b><u>Length and Capacity</u></b></p> <p><b><u>Soil Science</u></b></p> <p><b><u>States of Matter</u></b></p> <p><b><u>Using Your Senses</u></b></p> <p><b><u>Weather Watching</u></b></p>	<p>43-50; Activity 6, Pages 51-58; Activity 7, Pages 59-68;</p> <p>Activity 1, Pages 7-14;</p> <p>Activity 1, Pages 7-14;</p> <p>Activity 1, Pages 9-18; Activity 2, Pages 19-26; Activity 8, Pages 69-80; Activity 9, Pages 81-88;</p> <p>Activity 4, Pages 27; Activity 5, Pages 37; Activity 6, Pages 43; Activity 9, Pages 69; Activity 12, Pages 89-94;</p> <p>Activity 1, Pages 7-12;</p> <p>Activity 1, Pages 7-12; Activity 4, Pages 31-36; Activity 6, Pages 47-52;</p> <p>Activity 3, Pages 23-28; Activity 4, Pages 29-36; Activity 5, Pages 37-44;</p> <p>Activity 2, Pages 15-22; Activity 5, Pages 39-44; Activity 7, Pages 53-60;</p>
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**S6b. Collects and analyzes data using concepts and techniques in Mathematics Standard 4.**

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Collect and analyze data using concepts and technologies in Mathematics Standard 4, such as average, data displays, graphing, variability and sampling.	<p><b><u>From Seed to Plant</u></b></p> <p><b><u>Amazing Air</u></b></p> <p><b><u>Force and Motion</u></b></p> <p><b><u>Length and Capacity</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p>	<p>Throughout the Delta Science Module II Program students collect and analyze data and incorporate mathematics into data collecting and calculations. Some examples include the following:</p> <p>Activity 7, Pages 49-56;</p> <p>Activity 5, Pages 43-55;</p> <p>Activity 1, Pages 9-18; Activity 3, Pages 27-36; Activity 9, Pages 81-88;</p> <p>Activity 4, Pages 27; Activity 12, Pages 89-94;</p> <p>Activity 8, Pages 61-66; Activity</p>

	<p><b><u>Using Your Senses</u></b></p> <p><b><u>Weather Watching</u></b></p> <p><b><u>Animal Behavior</u></b></p> <p><b><u>Dinosaur Classification</u></b></p> <p><b><u>Looking at Liquids</u></b></p> <p><b><u>Measuring</u></b></p> <p><b><u>Plant and Animal Life Cycles</u></b></p>	<p>9, Pages 67-74;</p> <p>Activity 2, Pages 15-22;</p> <p>Activity 2, Pages 15-22; Activity 3, Pages 23-30; Activity 7, Pages 53-60; Activity 8, Pages 61-68;</p> <p>Activity 5, Pages 31-38; Activity 6, Pages 39-44; Activity 7, Pages 45-52; Activity 9, Pages 59-64; Activity 10, Pages 65-70; Activity 11, Pages 71-76;</p> <p>Activity 6, Pages 41-46; Activity 7, Pages 47-52;</p> <p>Activity 11, Pages 77-82;</p> <p>Activity 8, Pages 57-64; Activity 9, Pages 65-70; Activity 10, Pages 71-78; Activity 12, Pages 87-96;</p> <p>Activity 7, Pages 53-62;</p>
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**S6c. Acquires information from multiple sources, such as experimentation and print and non-print sources.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade four, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Acquire information from multiple sources, such as experimentation and print and non-print sources.	<p><b><u>Observing an Aquarium</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Sink or Float</u></b></p> <p><b><u>Weather Watching</u></b></p>	<p>Three information resources, experimental design, print (informational resources) and non-print resources, such as guest speakers or field trips, are in the Delta Science Modular program. See “Science and Careers” in the “Connections” feature that follows every Activity. Some examples of experimental design, field trip and print resources include the following:</p> <p>Activity 12, Pages 99-106;</p> <p>Activity 5, Pages 37-42; Activity 12, Pages 87-94;</p> <p>Activity 6, Pages 47-54, Activity Sheet 6;</p> <p>Activity 12, Pages 101-108;</p>

## S7. Scientific Communication

### S7a. Represents data and results in multiple ways.

<i>SCIENCE STANDARD</i> <i>By the end of grade four,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Represent data and results in multiple ways, such as numbers, tables, and graphs; drawings, diagrams, and artwork; and technical and creative writing.	<p><b><u>From Seed to Plant</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p> <p><b><u>Length and Capacity</u></b></p> <p><b><u>Measuring</u></b></p> <p><b><u>Weather Instruments</u></b></p>	<p>In all DSM II Modules recommended for Grades K-4, students organize data in tables and graphs, draw/ diagram evidence and provide explanations. The most evident component to convey the way this is done is through the <i>Student Activity Sheets</i> that accompany the lessons. The black line masters for the Activity Sheets are found at the end of the lesson plans in each Teacher's Guide and are visually embedded into the lesson plans at appropriate places. Examples are:</p> <p>Activities 1-12, Activity Sheets 1-12</p> <p>Activities 1-12, Activity Sheets 1-12;</p> <p>Activities 1-12, Activity Sheets 1-12;</p> <p>Activities 1-13, Activity Sheets 1-13;</p> <p>Activities 1-12, Activity Sheets 1-12;</p>

### S7b. Uses facts to support conclusions.

<i>SCIENCE STANDARD</i> <i>By the end of grade four,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Use facts to support conclusions.	<p><b><u>From Seed to Plant</u></b></p>	<p>The nature of the Delta Science Module II program is to provide experiences for students to investigate science phenomena from which students use this factual information to draw conclusions. The following is a representation of this activity:</p> <p>Activity 2, Pages 13-22; Activity 8, Pages 57-62; Activity 9, Pages</p>

	<p><u>Sunshine and Shadows</u></p> <p><u>Amazing Air</u></p> <p><u>Sink or Float</u></p>	<p>63-68;</p> <p>Activity 5, Pages 37-42;</p> <p>Activity 7, Pages 59-68; Activity 8, Pages 69-76;</p> <p>Activity 4, Pages 29-36; Activity 5, Pages 37-46</p>
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**S7c. Communicates in a form suited to the purpose and the audience.**

<i>SCIENCE STANDARD</i> <i>By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Communicate in a form suited to the purpose and audience, such as writing instructions that others can follow.	<p><u>Sink or Float</u></p> <p><u>Animal Behavior</u></p>	<p>Providing directions is most commonly found when students are asked to design their own experiments. The Activity Sheets provide evidence of this. The following are two examples:</p> <p>Activity 12, Pages 91-98, Activity Sheet 12;</p> <p>Activity 12, Pages 77-82, Activity Sheet 12;</p>

**S7d. Critiques written and oral explanations, and uses data to resolve disagreements.**

<i>SCIENCE STANDARD</i> <i>By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Critique written and oral explanations, and use data to resolve disagreements.		

**S8. Scientific Investigation**

**S8a. Demonstrate Scientific competence by completing an experiment.**

<i>SCIENCE STANDARD</i> <i>By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
During the course of a year, complete an experiment, such as conducting a fair test.	<p><u>Amazing Air</u></p>	<p>The Delta Science Modules are designed to guide students to plan and conduct simple to more complex experiments. The following examples site a few that are appropriate for Grades K-3:</p> <p>Activity 3, Pages 25-34; Activity 12, Pages 101-108;</p>

	<p><b><u>Classroom Plants</u></b></p> <p><b><u>Plant and Animal Population</u></b></p> <p><b><u>Sink or Float</u></b></p> <p><b><u>States of Matter</u></b></p> <p><b><u>Using Your Senses</u></b></p> <p><b><u>Animal Behavior</u></b></p> <p><b><u>Food Chains and Webs</u></b></p> <p><b><u>Insect Life</u></b></p> <p><b><u>Powders and Crystals</u></b></p> <p><b><u>Water Cycle</u></b></p> <p><b><u>Weather Instruments</u></b></p>	<p>Activity 5, Pages 37-42;</p> <p>Activity 1, Pages 7-14; Activity 9, Pages 67-74;</p> <p>Activity 2, Pages 15-22; Activity 3, Pages 23-28; Activity 6, Pages 47-54; Activity 9, Pages 69-74; Activity 12, Pages 91-98;</p> <p>Activity 4, Pages 31-36; Activity 5, Pages 37-46;</p> <p>Activity 9, Pages 67-72;</p> <p>This module is designed around teaching students to design experiments to learn about mealworm behavior. They learn about asking questions and pursuing answers in controlled experiments.</p> <p>Activity 3, Pages 21-26;</p> <p>Activity 8, Pages 55-60;</p> <p>Activity 5, Pages 35-42; Activity 6, Pages 43-48; Activity 7, Pages 49-54; Activity 8, Pages 55-62; Activity 9, Pages 63-70;</p> <p>Activity 12, Pages 87-94;</p> <p>Activity 7, Pages 47-54;</p>
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**S8b. Demonstrates competence by completing a systematic observation.**

<i>SCIENCE STANDARD By the end of grade four, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
During the course of a year, complete a systematic observation, such as a field study.	<p><b><u>Observing an Aquarium</u></b></p> <p><b><u>Classroom Plants</u></b></p> <p><b><u>Plant and Animal Populations</u></b></p> <p><b><u>Insect Life</u></b></p> <p><b><u>Small Things and Microscopes</u></b></p>	<p>Activity 12, Pages 99-106;</p> <p>Activity 12, Pages 87-94;</p> <p>Activity 3, Pages 23-28;</p> <p>Activity 4, Pages 29-34;</p> <p>Activity 10, Pages 61-66;</p>

**S8c. Demonstrates scientific competency by completing a design.**

<p><b>SCIENCE STANDARD</b>  <i>By the end of grade four,  students know and are able to:</i></p>	<p><b>DELTA SCIENCE MODULE II</b></p>	<p><b>PAGE NUMBER(S)</b></p>
<p>During the course of a year, complete <i>a design, such as building a model or scientific apparatus.</i></p>	<p><b><u>Insect Life</u></b></p> <p><b><u>Solar System</u></b></p> <p><b><u>Water Cycle</u></b></p> <p><b><u>Measuring</u></b></p> <p><b><u>Earth Movements</u></b></p> <p><b><u>Weather Watching</u></b></p>	<p>Throughout the Delta Science Module II Program, students create and use models to help them understand or demonstrate their mastery of science concepts. The following are a few examples:</p> <p>Activity 1, Pages 7-14;</p> <p>Activity 2, Pages 15-20; Activity 12, Pages 93-102;</p> <p>Activity 9, Pages 67-72; Activity 12, Pages 87-94;</p> <p>Activity 11, Pages 79-86;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 3, Pages 19-26;</p> <p>Activity 8, Pages 61-68; Activity 9, Pages 69-78;</p>

**S8d. Demonstrates scientific competence by completing non-experimental research using print and electronic information.**

<p><b>SCIENCE STANDARD</b>  <i>By the end of grade four,  students know and are able to:</i></p>	<p><b>DELTA SCIENCE MODULE II</b></p>	<p><b>PAGE NUMBER(S)</b></p>
<p>During the course of a year, complete <i>non-experimental research using print and electronic information such as journals, video or computers.</i></p>		

# Middle School Science

## S1. Physical Sciences Concepts

### S1a. Demonstrates understanding of properties and changes of properties of matter.

<i>SCIENCE STANDARD</i> <i>By the end of grade eight,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of properties and changes in properties in matter, such as density and boiling point; chemical reactivity; and conservation of matter.	<u><b>Looking at Liquids</b></u>	Activity 1, Pages 7-14; Activity 6, Pages 43-48; Activity 7, Pages 49-56; Activity 8, Pages 57-62; Activity 9, Pages 63-70; Activity 11, Pages 77-82; Activity 12, Pages 83-90;
	<u><b>Powders and Crystals</b></u>	Activity 4, Pages 27-34; Activity 5, Pages 35-42; Activity 6, Pages 43-48; Activity 7, Pages 49-54; Activity 8, Pages 55-62; Activity 9, Pages 63-70;
	<u><b>Chemical Interactions</b></u>	Activity 1, Pages 7-14;
	<u><b>Sound</b></u>	Activity 1, Pages 7-14; Activity 7, Pages 51-58; Activity 8, Pages 59-64;
	<u><b>Water Cycle</b></u>	Activity 4, Pages 29-34; Activity 7, Pages 51-58; Activity 8, Pages 59-66; Activity 9, Pages 67-72; Activity 12, Pages 87-94; Activity 13, Pages 95-102;
	<u><b>Weather Instruments</b></u>	Activity 4, Pages 27-32; Activity 5, Pages 33-40; Activity 4, Pages 27-32; Activity 5, Pages 33-40; Activity 10, Pages 69-76; Activity 12, Pages 87-94; Activity 13;
	<u><b>Color and Light</b></u>	Activity 6, Pages 45-52;
	<u><b>Electromagnetism</b></u>	Activity 1, Pages 7-10; Activity 2, Pages 11-14; Activity 3, Pages 15-20; Activity 4, Pages 21-24;
	<u><b>Erosion</b></u>	Activity 8, Pages 55-60;
	<u><b>Flight and Rocketry</b></u>	Activity 1, Pages 7-14;
Produce evidence that demonstrates understanding of	<u><b>Oceans</b></u>	Activity 2, Pages 19-26; Activity 3, Pages 27-38; Activity 8, Pages 85-94;

properties and changes in properties in matter, such as density and boiling point; chemical reactivity; and conservation of matter.	<b><u>Pollution</u></b>	Activity 7, Pages 47-52; Activity 8, Pages 53-58;
	<b><u>Rocks and Minerals</u></b>	Activity 1, Pages 7-12; Activity 3; Activity 4, Pages 27-32; Activity 5, Pages 33-38; Activity 6, Pages 39-44; Activity 7, Pages 45-50; Activity 10, Pages 65-72;
	<b><u>Solar Energy</u></b>	Activity 13, Pages 83-88;
	<b><u>Chemical Interactions</u></b>	Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 3, Pages 23-28; Activity 9, Pages 65-72; Activity 10, Pages 73-80; Activity 11, Pages 81-86; Activity 12, Pages 87-92; Activity 12, Pages 93-98;
	<b><u>Famous Scientists</u></b>	Activity 1, Pages 11-20;
	<b><u>If Shipwrecks Could Talk</u></b>	Activity 4, Pages 35-46;

**S1b. Demonstrates understanding of position and motion and forces.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade eight, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Produce evidence that demonstrates understanding of position and motion of motions and forces, such as inertia and the net effects of balanced and unbalanced forces.	<b><u>Earth Movements</u></b>	Activity 5, Pages 35-42; Activity 6, Pages 43-50;
	<b><u>Solar System</u></b>	Activity 2, Pages 15-20; Activity 9, Pages 67-74; Activity 12, Pages 93-102;
	<b><u>Sound</u></b>	Activity 2, Pages 15-22; Activity 3, Pages 23-28; Activity 5, Pages 37-42; Activity 6, Pages 43-50; Activity 7, Pages 51-58; Activity 8, Pages 59-64;
	<b><u>Weather Instruments</u></b>	Activity 4, Pages 27-32; Activity 5, Pages 33-40;
	<b><u>Flight and Rocketry</u></b>	Activity 8, Pages 73-82; Activity 9, Pages 83-90; Activity 10, Pages 91-102; Activity 12, Pages 113-122;
	<b><u>Simple Machines</u></b>	Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 5, Pages 31-38; Activity 6, Pages 39-44; Activity 7, Pages 45-50; Activity 8, Pages 51-56; Activity 9, Pages

	<p><b><u>Earth, Sun and Moon</u></b></p> <p><b><u>Famous Scientists</u></b></p> <p><b><u>Newton's Toy Box</u></b></p>	<p>57-62;</p> <p>Activity 1, Pages 7-14; Activity 8, Pages 61-68; Activity 9, Pages 69-78; Activity 10, Pages 79-86;</p> <p>Activity 2, Pages 21-28; Activity 3, Pages 29-34;</p> <p>In this module, students experiment with familiar objects to grasp the meaning of Newton's three laws of motion. They also learn about inertia, gravity, potential and kinetic energy, acceleration, mass, force and momentum. Some examples include: Activity 1, Pages 7-12; Activity 3, Pages 19-24; Activity 11, Pages 59-62;</p>
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**S1c. Demonstrates understanding of transfer of energy and the nature of chemical reaction.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding transfer of energy, such as transformation of energy as heat; light, and mechanical motion, and sound; and the nature of chemical reaction.	<p><b><u>Electrical Circuits</u></b></p> <p><b><u>Magnets</u></b></p> <p><b><u>Measuring</u></b></p> <p><b><u>Powders and Crystals</u></b></p> <p><b><u>Sound</u></b></p> <p><b><u>Weather Instruments</u></b></p> <p><b><u>Flight and Rocketry</u></b></p> <p><b><u>Simple Machines</u></b></p>	<p>Activity 8, Pages 55-62; Activity 11, Pages 75-80;</p> <p>Activity 11, Pages 65-70;</p> <p>Activity 11, Pages 79-86; Activity 12, Pages 87-96;</p> <p>Activity 6, Pages 43-48; Activity 9, Pages 63-70;</p> <p>Activity 2, Pages 15-22; Activity 3, Pages 23-28; Activity 5, Pages 37-42; Activity 6, Pages 43-50; Activity 7, Pages 51-58; Activity 8, Pages 59-64;</p> <p>Activity 6, Pages 41-46;</p> <p>Activity 3, Pages 27-36; Activity 4, Pages 37-46; Activity 9, Pages 83-90; Activity 12, Pages 113-122;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 5, Pages 31-38; Activity 6, Pages 39-44; Activity 7, Pages 45-50; Activity</p>



	<p><b><u>Fungi- Small Wonders</u></b></p> <p><b><u>Pond Life</u></b></p> <p><b><u>Plants in Our World</u></b></p> <p><b><u>Oceans</u></b></p> <p><b><u>You and Your Body</u></b></p>	<p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 3, Pages 19-24;</p> <p>Activity 8, Pages 57-62; Activity 9, Pages 63-68;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 4, Pages 25-30; Activity 10, Pages 63-68;</p> <p>Activity 10, Pages 107-118</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 4, Pages 27-32; Activity 6, Pages 41-46; Activity 7, Pages 47-52; Activity 8, Pages 53-58; Activity 13, Pages 81-86; Activity 14, Pages 87-92;</p>
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**S2b. Demonstrates understanding of reproduction and heredity and the role of genes and environment on trait expression.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade eight, students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of reproduction and heredity, such as sexual and asexual reproduction; and the role of genes and environment on trait expression.	<p><b><u>Plant and Animal Life Cycles</u></b></p> <p><b><u>Fungi-Small Wonders</u></b></p> <p><b><u>Pond Life</u></b></p> <p><b><u>DNA-From Genes to Proteins</u></b></p>	<p>Activity 5, Pages 39-46; Activity 8, Pages 63-70; Activity 9, Pages 71-78; Activity 10, Pages 79-84;</p> <p>Activity 3, Pages 19-24; Activity 4, Pages 25-30;</p> <p>Activity 10, Pages 69-74;</p> <p>Activity 5, Pages 31-36; Activity 6, Pages 37-44; Activity 7; Activity 8, Pages 53-60;</p>

**S2c. Demonstrates understanding of regulation and behavior and response to environmental stimuli.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade eight, students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of regulation and behavior, such as senses and behavior; and response to environmental stimuli.	<b><u>Animal Behavior</u></b>	This module (12 activities) is designed to teach students experimental design and to help them learn about mealworm behavior in response to varying conditions such as odor, color, food air water heat and light.

	<b><u>Dinosaur Classification</u></b>	Activity 8, Pages 53-58;
	<b><u>Food Chains and Webs</u></b>	Activity 4, Pages 27-34; Activity 5, Pages 35-40; Activity 6, Pages 41-46; Activity 7, Pages 47-54;  Activity 5, Pages 35-40; Activity 8, Pages 55-60; Activity 11, Pages 73-78;
	<b><u>Fungi-Small Wonders</u></b>	Activity 5, Pages 31-36; Activity 6, Pages 37-44; Activity 7, Pages 45-50;
	<b><u>Pollution</u></b>	Activity 6, Pages 41-46; Activity 10, Pages 65-70; Activity 12, Pages 77-82;
	<b><u>Pond Life</u></b>	Activity 5, Pages 35-40; Activity 6, Pages 41-48; Activity 7, Pages 49-56, Activity Sheet 7; Activity 8, Pages 57-62; Activity 9, Pages 63-68, Activity Sheet 9;
	<b><u>You and Your Body</u></b>	Activity 3, Pages 21-26; Activity 7, Pages 47-52; Activity 14, Pages 87-92;
	<b><u>Famous Scientists</u></b>	Activity 7, Pages 65-76; Activity 8, Pages 77-84; Activity 9, Pages 85-94;
	<b><u>If Shipwrecks Could Talk</u></b>	Activity 9, Pages 89-94;
	<b><u>Plants in Our World</u></b>	Activity 3, Pages 19-24; Activity 8, Pages 51-56; Activity 9, Pages 57-62;

**S2d. Demonstrates understanding of population and ecosystems and the effects of resources and energy transfer on populations.**

<i>SCIENCE STANDARD</i> <i>By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Produce evidence that demonstrates understanding of populations and ecosystems such as the roles of producers, consumers, and decomposers in a food web; and the effects of resources and energy transfer on populations.	<b><u>Food Chains and Webs</u></b>	This module is designed for students to investigate food chains and webs by observing the interaction of plants and animals (crickets, chameleons, earthworms). They classify the organisms as primary, secondary or tertiary consumers or decomposers, based on what it eats

	<b><u>Insect Life</u></b>	Activity 10, Pages 67-72;
	<b><u>Pond Life</u></b>	Activity 11, Pages 75-80;
	<b><u>Plants in Our World</u></b>	Activity 8, Pages 51-56;

**S2e. Demonstrates understanding of evolution, diversity and adaptation of organisms.**

<b>SCIENCE STANDARD</b> <i>By the end of grade eight, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
Produce evidence that demonstrates understanding of evolution, diversity, and adaptation of organisms, such as common ancestry, speciation, adaptation, variation, and extinction.	<b><u>Dinosaur Classification</u></b>	Activity 1, Pages 7-14; Activity 8, Pages 53-58; Activity 9, Pages 59-66;
	<b><u>Food Chains and Webs</u></b>	Activity 7, Pages 47-54;
	<b><u>Insect Life</u></b>	Activity 11, Pages 73-78; Activity 12, Pages 79-84;
	<b><u>Oceans</u></b>	Activity 10, Pages 107-118; Activity 11, Pages 119-128; Activity 12, Pages 129-136;
	<b><u>Pond Life</u></b>	Activity 10, Pages 69-74;
	<b><u>DNA-From Genes to Proteins</u></b>	Activity 1, Pages 7-12; Activity 5, Pages 31-36; Activity 9; Activity 10, Pages 69-74;

**S3. Earth and Space Sciences Concepts**

**S3a. Demonstrates understanding of properties of the structure of the Earth system.**

<b>SCIENCE STANDARD</b> <i>By the end of grade eight, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
Produce evidence that demonstrates understanding of Earth systems, such climate. as crustal plates and land forms; water and rock cycles; oceans, weather and climate.	<b><u>Earth Movements</u></b>	Activity 2, Pages 13-18; Activity 3, Pages 19-26; Activity 4, Pages 27-34; Activity 5, Pages 35-42; Activity 6, Pages 43-50; Activity 7, Pages 41-56; Activity 9, Pages 65-70; Activity 10, Pages 71-80;
	<b><u>Water Cycle</u></b>	Activity 4, Pages 29-34; Activity 5, Pages 35-42; Activity 8, Pages 59-66; Activity 9, Pages 67-72; Activity 12, Pages 87-94;
	<b><u>Weather Instruments</u></b>	In this module (12 activities) students explore and measure

<p>Produce evidence that demonstrates understanding of Earth systems, such as crustal plates and land forms; water and rock cycles; oceans, weather and climate.</p>	<p><b><u>Oceans</u></b></p> <p><b><u>Rocks and Minerals</u></b></p> <p><b><u>Weather Forecasting</u></b></p> <p><b><u>Earth Processes</u></b></p>	<p>conditions that compose the concept of weather. This includes air temperature, pressure and wind direction and velocity, humidity, and precipitation.</p> <p>Activity 1, Pages 9-18; Activity 4, Pages 39-50; Activity 5, Pages 51-60; Activity 2, Pages 13-20;</p> <p>This module (12 activities) has been developed to help students discover weather forecasting and data collection. The data collection includes temperature, rainfall, wind, barometric pressure, fronts (isobars and isotherms), humidity, clouds and storms, which are all elements of weather.</p> <p>Activity 1, Pages 7-14; Activity 6, Pages 47-52; Activity 13, Pages 95-104; Activity 14, Pages 105-112;</p>
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**S3b. Demonstrates understanding of Earth’s history.**

<p><b>SCIENCE STANDARD</b> <i>By the end of grade eight, students know and are able to:</i></p>	<p><b>DELTA SCIENCE MODULE II</b></p>	<p><b>PAGE NUMBER(S)</b></p>
<p>Produce evidence that demonstrates understanding of Earth’s history, such as Earth processes including erosion and movement of plates; changes over time and fossil evidence.</p>	<p><b><u>Earth Processes</u></b></p> <p><b><u>Dinosaur Classification</u></b></p> <p><b><u>Earth Movements</u></b></p> <p><b><u>Erosion</u></b></p>	<p>Activity 1, Pages 7-14; Activity 3, Pages 21-28; Activity 4, Pages 31-36; Activity 6, Pages 47-52; Activity 13, Pages 95-104; Activity 14, Pages 105-112;</p> <p>Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 7, Pages 47-52; Activity 8, Pages 53-58, Activity Sheet 8; Activity 9, Pages 59-66; Activity 10, Pages 67-74;</p> <p>Activity 2, Pages 13-18; Activity 3, Pages 19-26; Activity 5, Pages 35-42; Activity 6, Pages 43-50; Activity 7, Pages 41-56; Activity 8, Pages 57-64; Activity 9, Pages 65-70;</p> <p>Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 5;</p>

		Activity 6, Pages 41-46; Activity 10, Pages 67-72; Activity 11, Pages 73-80; Activity 12, Pages 81-91;
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**S3c. Demonstrates understanding of Earth in the Solar system.**

<i><b>SCIENCE STANDARD</b></i> <i>By the end of grade eight, students know and are able to:</i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of Earth in the solar system, such as the predictable motion of planets, moons, and other objects in the solar system including days, years, moon phases, and eclipses; and the role of the Sun as a major source of energy for phenomena on the Earth's surface.	<p><u><b>Solar System</b></u></p> <p><u><b>Solar Energy</b></u></p> <p><u><b>Astronomy</b></u></p> <p><u><b>Earth, Moon and Sun</b></u></p>	<p>Activity 1, Pages 7-14; Activity 2, Pages 15-20; Activity 5; Activity 6, Pages 45-52; Activity 7, Pages 53-58; Activity 8, Pages 59-66; Activity 9, Pages 67-74; Activity 12, Pages 93-102;</p> <p>In this DSM II module (13 activities), students capture the energy of the sun from its source to a receiver. In a series of heat exchange experiments, they test variables that affect the energy transfer. Finally, solar energy is converted to electrical energy in solar powered motors.</p> <p>Activity 1, Pages 7-16; Activity 2, Pages 17-24; Activity 4, Pages 35-42; Activity 5, Pages 43-52; Activity 6, Pages 53-60; Activity 11, Pages 93-100;</p> <p>Activity 1, Pages 7-14; Activity 2, Pages 15-22; Activity 3, Pages 23-28; Activity 4, Pages 29-36; Activity 5, Pages 37-44; Activity 8, Pages 61-68; Activity 9, Pages 69-78; Activity 10; Activity 11, Pages 87-94;</p>

**S3d. Demonstrates understanding of natural resource management.**

<i><b>SCIENCE STANDARD</b></i> <i>By the end of grade eight, students know and are able to:</i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of natural resource management.	<p><u><b>Erosion</b></u></p> <p><u><b>Rocks and Minerals</b></u></p>	<p>Activity 1, Pages 7-14, "Connections"; Activity 3, Pages 23-28, "Connections"; Activity 10, Pages 67-72, "Connections"; Activity 11, Pages 73-80, "Connections";</p> <p>Activity 8, Pages 51-56, Connections";</p>

## S4. Scientific Connections and Applications

### S4a. Demonstrates understanding of big ideas and unifying concepts.

<p><b>SCIENCE STANDARD</b>  <i>By the end of grade eight,  students know and are able to:</i></p>	<p><b>DELTA SCIENCE MODULE II</b></p>	<p><b>PAGE NUMBER(S)</b></p>
<p>Produce evidence that demonstrates understanding of big ideas and unifying concepts, such as order and organization; models, form and function; change and constancy; and cause and effect.</p>	<p>In every Delta Science Module there is evidence of the application of unifying concepts. The following is only a representation of the number and themes.</p> <p><b><u>Animal Behavior</u></b></p> <p><b><u>Color and Light</u></b></p> <p><b><u>Dinosaur Classification</u></b></p> <p><b><u>Earth Movements</u></b></p> <p><b><u>Electrical Circuits</u></b></p> <p><b><u>Electromagnetism</u></b></p> <p><b><u>Erosion</u></b></p> <p><b><u>Flight and Rocketry</u></b></p> <p><b><u>Food Chains and Webs</u></b></p> <p><b><u>Fungi-Small Wonders</u></b></p> <p><b><u>Insect Life</u></b></p> <p><b><u>Looking at Liquids</u></b></p> <p><b><u>Magnets</u></b></p> <p><b><u>Plant and Animal Life Cycles</u></b></p> <p><b><u>Small Things and Microscopes</u></b></p> <p><b><u>Solar System</u></b></p> <p><b><u>Sound</u></b></p> <p><b><u>Water Cycle</u></b></p> <p><b><u>Weather Instruments</u></b></p> <p><b><u>Weather Watching</u></b></p>	<p>Activity 4, Pages 25-30</p> <p>Activity 1, Pages 7-12;</p> <p>Activity 10, Pages 67-74</p> <p>Activity 9, Pages 65-70;</p> <p>Activity 3, Pages 21-28;</p> <p>Activity 6, Pages 31-36;</p> <p>Activity 2, Pages 15-22;</p> <p>Activity 2, Pages 17-26;</p> <p>Activity 3, Pages 21-26;</p> <p>Activity 5, Pages 31-36;</p> <p>Activity 8, Pages 55-60;</p> <p>Activity 11, Pages 77-82;</p> <p>Activity 2, Pages 13-18;</p> <p>Activity 12, Pages 91-98;</p> <p>Activity 5, Pages 31-36;</p> <p>Activity 9, Pages 67-74;</p> <p>Activity 8, Pages 59-64;</p> <p>Activity 9, Pages 67-72;</p> <p>Activity 10, Pages 69-76;</p> <p>Activity 9, Pages 69-78</p>

**S4b. Demonstrates understanding of the designed world.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade eight,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of the designed world, such as development of agricultural techniques; and the viability of technological designs.	<u>Simple Machines</u>  <u>Electrical Circuits</u>  <u>Erosion</u>  <u>Magnets</u>  <u>Weather Instruments</u>  <u>Electromagnetism</u>  <u>Flight and Rocketry</u>  <u>Pollution</u>  <u>Solar Energy</u>  <u>DNA-From Genes to Proteins</u>	Activity 12, Pages 109-116;  Activity 12, Pages 81-86;  Activity 3, Pages 23-28;  Activity 12, Pages 71-76;  Activity 3, Pages 21-26;  Activity 9, Pages 51-56;  Activity 9, Pages 83-90; Activity 12, Pages 113-12;  Activity 6, Pages 41-46;  Activity 10, Pages 65-70; Activity 13, Pages 83-88;  Activity 13, Pages 89-94;

**S4c. Demonstrates understanding of personal health.**

<i><b>SCIENCE STANDARD</b></i> <i><b>By the end of grade eight,</b></i> <i><b>students know and are able to:</b></i>	<i><b>DELTA SCIENCE MODULE II</b></i>	<i><b>PAGE NUMBER(S)</b></i>
Produce evidence that demonstrates understanding of health, such as nutrition, exercise and disease; effects of drugs and toxic substances; personal and environmental safety; and resources and environmental stress.	<u>Chemical Interactions</u>  <u>Plants in Our World</u>	Personal safety is an important factor as students investigate with materials that may present a risk if used improperly. Precautionary information is presented in both the Teacher Manual (shaded boxes) and on student Activity Sheets. A few examples are included:  Activity 1, Pages 7-14; Activity 6, Pages 43-52, Activity Sheet 6, Part A;  Activity 7, Pages 43-50; Activity 8, Pages 51-56, Activity Sheet 8, Part A;



	<u>Solar Energy</u>	Activity 10, Pages 65-70; Activity 11, Pages 71-76;
	<u>Fungi – Small Wonders</u>	Activity 5, Pages 31-36; Activity 6, Pages 37-44; Activity 7, Pages 45-50; Activity 11, Pages 69-74;
	<u>Electromagnetism</u>	Activity 6, Pages 31-36;
	<u>Electrical Connections</u>	Activity 7, Pages 45-52; Activity 9, Pages 59-64; Activity 10, Pages 65-70;
	<u>Famous Scientists</u>	Activity 5, Pages 45-54;
	<u>If Shipwrecks Could Talk</u>	Activity 7, Pages 69-76;
	<u>Plants In Our World</u>	Activity 3, Pages 19-24;
	<u>Measuring</u>	Activity 13, Pages 97-104;
	<u>Water Cycle</u>	Activity 13, Pages 95-102;

**S5b. Uses concepts from Science Standards 1 to 4 to explain a variety of observations and phenomena.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Use concepts from Science Standards 1 to 4 to explain a variety of observations and phenomena.		Delta Science Module II Program is an interactive science program where students use materials and equipment to explore science phenomena. Lessons are accompanied by <i>Student Activity Sheets</i> on which students respond to questions related to observations, predictions, inferences and explanations. The data-collecting format of many contains tables and graphs.

**S5c. Uses evidence from reliable sources to develop descriptions, explanations and models.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Use evidence from reliable sources to develop descriptions, explanations and models..	<u>Dinosaur Classification</u>	Activity 3, Pages 23-28; Activity 4, Pages 29-34;
	<u>Earth Movements</u>	Activity 2, Pages 13-18; Activity 6, Pages 43-50; Activity 7, Pages

	<p><b><u>Solar System</u></b></p> <p><b><u>Erosion</u></b></p> <p><b><u>Oceans</u></b></p> <p><b><u>You and Your Body</u></b></p> <p><b><u>Chemical Interactions</u></b></p> <p><b><u>DNA-From Genes to Proteins</u></b></p> <p><b><u>Earth, Moon and Sun</u></b></p>	<p>41-56; Activity 9, Pages 65-70;</p> <p>Activity 5, Pages 37-44; Activity 6, Pages 45-52; Activity 7, Pages 53-58; Activity 8, Pages 59-66;</p> <p>Activity 2, Pages 15-22;</p> <p>Activity 6, Pages 61-70; Activity 7, Pages 71-84; Activity 8, Pages 85-94;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 6, Pages 41-46;</p> <p>Activity 4, Pages 29-36; Activity 5, Pages 37-42; Activity 7, Pages 53-58; Activity 8, Pages 59-64;</p> <p>Activity 4, Pages 25-30; Activity 6, Pages 37-44;</p> <p>Activity 3, Pages 23-28; Activity 4, Pages 29-36; Activity 10, Pages 79-86; Activity 11, Pages 87-94; Activity 12, Pages 95-104;</p>
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**S5d. Proposes, recognizes, analyzes, considers, critiques alternative explanations; and distinguishes between fact and opinion.**

<i>SCIENCE STANDARD</i> <i>By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Propose, recognize analyze, consider, and critique alternative explanations; distinguish between fact and opinion.	<p><b><u>Electrical Circuits</u></b></p> <p><b><u>Magnets</u></b></p> <p><b><u>Dinosaur Classification</u></b></p> <p><b><u>Food Chains and Webs</u></b></p>	<p>The Teacher Guide of the Delta Science Module II Program offers carefully guided questions and possible responses. This design encourages the discovery of scientific phenomena and leads students to differentiate between fact and opinion and avoid students' misconceptions. Some examples include:</p> <p>Activity 9, Pages 63-68;</p> <p>Activity 2, Pages 13-18; Activity 3, Pages 19-22;</p> <p>Activity 4, Pages 29-34;</p> <p>Activity 8, Pages 55-60; Activity 10, Pages 67-74;</p>

	<u>Magnets</u>	Activity 3, Pages 19-22; Activity 4, Pages 23-28;
	<u>Fungi-Small Wonders</u>	Activity 12, Pages 75-80;
	<u>Lenses and Mirrors</u>	Activity 2, Pages 13-20;
	<u>Astronomy</u>	Activity 7, Pages 61-68; Activity 9, Pages 77-84; Activity 12, Pages 101-110;
	<u>Earth, Moon and Sun</u>	Activity 3, Pages 23-28; Activity 4, Pages 29-36; Activity 10, Pages 79-86; Activity 11, Pages 87-94; Activity 12, Pages 95-104;
	<u>Weather Forecasting</u>	Activity 11, Pages 75-80;

**S5e. Identifies problems; proposes and implements solutions; and evaluates the accuracy, design, and outcomes of investigations.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Identify problems; propose and implement solutions; and evaluate the accuracy, design, and outcomes of investigations.	<u>Measuring</u>	Activity 13, Pages 97-104;
	<u>Electromagnetism</u>	Activity 10, Pages 57-64;
	<u>Flight and Rocketry</u>	Activity 5, Pages 47-56;
	<u>Fungi-Small Wonders</u>	Activity 7, Pages 45-50;
	<u>Lenses and Mirrors</u>	Activity 12, Pages 89-94;
	<u>Solar Energy</u>	Activity 9, Pages 59-64;
	<u>Electrical Connections</u>	Activity 13, Pages 83-88;

**S5f. Works individually and in teams to collect and share information and ideas.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Work individually and in a team to collect and share information and ideas.		In all modules, students work in cooperative groups and employ the nature of science activity, which involves communication, reasoning, skepticism and cooperative efforts

## S6. Scientific Tools and Technologies

### S6a. Uses technology and tools to observe and measure objects, organisms, and phenomena, directly, indirectly, and remotely.

<i>SCIENCE STANDARD</i> <i>By the end of grade eight,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Use technology and tools (such as traditional laboratory equipment, video, and computer aids) to observe and measure objects, organisms, and phenomena, directly, indirectly, and remotely.	<p><u>Electromagnetism</u></p> <p><u>Erosion</u></p> <p><u>Lenses and Mirrors</u></p> <p><u>Pollution</u></p> <p><u>Solar Energy</u></p> <p><u>Weather Forecasting</u></p> <p><u>Chemical Interactions</u></p> <p><u>Earth Processes</u></p>	<p>“Hands-on Science” is the nature of Delta Science Modules thus, the success of the lessons is dependent on developmentally-appropriate data-gathering tools. Many have videos that support instruction. Examples of how these are used can be found in the following references:</p> <p>Activity 10, Pages 57-64; Activity 11, Pages 65-70;</p> <p>Activity 2, Pages 15-22;</p> <p>Activity 8, Pages 55-66;</p> <p>Activity 8, Pages 55-66;</p> <p>Activity 10, Pages 65-70;</p> <p>Activity 5, Pages 35-42;</p> <p>Activity 10, Pages 73-80; Activity 11, Pages 81-86; Activity 12, Pages 87-92;</p> <p>Activity 9, Pages 69-78;</p>

### S6b. Collects and analyzes data using a variety of formats.

<i>SCIENCE STANDARD</i> <i>By the end of grade eight,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Record and store data using a variety of formats, such as data bases, audiotapes, and videotapes.		

**S6c. Collects and analyzes data using concepts and techniques in Mathematics Standard 4.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Collect and analyze data using a variety of formats, such as data bases, audiotapes, and videotapes.		

**S6d. Acquires information from multiple resources.**

<i>SCIENCE STANDARD By the end of grade eight, students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Acquire information from multiple sources, such as print the Internet, computer data bases, and experimentation.	<p><u>Dinosaur Classification</u></p> <p><u>Insect Life</u></p> <p><u>Magnets</u></p> <p><u>Small Things and Microscopes</u></p> <p><u>Flight and Rocketry</u></p> <p><u>Fungi-Small Wonders</u></p> <p><u>Pond Life</u></p> <p><u>Rocks and Minerals</u></p>	<p>Three information resources, experimental design, print (informational resources) and non-print resources, such as guest speakers, videos or field trips, are in the Delta Science Modular program. See “Science and Careers” for suggestions of guest speakers in the “Connections” feature that follows every Activity. Some examples of experimental design, field trip and print resources include the following:</p> <p>Activity 12, Pages 81-86;</p> <p>Activity 13, Pages 85-90; Activity 8, Pages 55-60; Activity 4, Pages 29-34;</p> <p>Activity 12, Pages 71-76;</p> <p>Activity 10, Pages 61-66;</p> <p>Activity 12, Pages 113-122;</p> <p>Activity 3, Pages 19-24; Activity 11, Pages 69-74; Activity 12, Pages 75-80;</p> <p>Activity 3, Pages 19-26; Activity 12, Pages 81-86;</p> <p>Activity 12, Pages 81-86;</p>



	<p><b><u>Earth Processes</u></b></p> <p><b><u>Electrical Connections</u></b></p> <p><b><u>Oceans</u></b></p> <p><b><u>Plants in Our World</u></b></p>	<p>Activity 7, Pages 55-60, Activity Sheet 7, Part A; Activity 12, Pages 89-104, Activity Sheet 12;</p> <p>Activity 2, Pages 13-18, Activity Sheet 2, Parts A and B; Activity 8, Pages 53-58, Activity Sheet 8, Parts A and B; Activity 9, Pages 59-64, Activity Sheet 9;</p> <p>Activity 3, Pages 27-38, Activity Sheet 3, Parts A and B; Activity 8, Pages 85-94, Parts A and B;</p> <p>Activity 3, Pages 19-24, Activity Sheet 3; Activity 4, Pages 25-30, Activity Sheet 4;</p>
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**S7b. Argues from evidence.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade eight, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Argue from evidence, such as data produced through his or her own experimentation or by others.	<p><b><u>Electrical Circuits</u></b></p> <p><b><u>Fungi-Small Wonders</u></b></p> <p><b><u>Lenses and Mirrors</u></b></p> <p><b><u>Solar Energy</u></b></p> <p><b><u>Astronomy</u></b></p>	<p>On several occasions students develop experiments to prove a hypothesis. At times these are done in groups or individually. The following examples are instances where students develop their own experiments and share these with the class:</p> <p>Activity 13, Pages 83-88;</p> <p>Activity 12, Pages 75-80;</p> <p>Activity 12, Pages 89-94;</p> <p>Activity 9, Pages 59-64;</p> <p>Activity 12, Pages 101-110;</p>

**S7c. Critiques published material.**

<b><i>SCIENCE STANDARD</i></b> <b><i>By the end of grade eight, students know and are able to:</i></b>	<b><i>DELTA SCIENCE MODULE II</i></b>	<b><i>PAGE NUMBER(S)</i></b>
Critique published materials.		

**S7d. Explains a scientific concept or procedure to other students.**

<i>SCIENCE STANDARD</i> <i>By the end of grade eight,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Explain a scientific concept or procedure to other students.	<u>Electrical Circuits</u> <u>Fungi-Small Wonders</u> <u>Lenses and Mirrors</u> <u>Solar Energy</u> <u>Astronomy</u>	Activity 13, Pages 83-88; Activity 12, Pages 75-80; Activity 12, Pages 89-94; Activity 9, Pages 59-64; Activity 12, Pages 101-110;

**S7e. Communicates in a form suited to the purpose and the audience.**

<i>SCIENCE STANDARD</i> <i>By the end of grade eight,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
Communicate in a form suited to the purpose and audience, such as writing instructions that others can follow; critiquing written and oral explanations; and using data to resolve disagreements.	<u>Electrical Circuits</u> <u>Fungi-Small Wonders</u> <u>Lenses and Mirrors</u> <u>Solar Energy</u> <u>Astronomy</u>	Often in the Delta Science Module II program, students develop experiments to prove a hypothesis. At times these are done in groups or individually. The following examples are instances where students develop their own experiments in a format that corresponds with the scientific method. Some examples are:  Activity 13, Pages 83-88; Activity 12, Pages 75-80; Activity 12, Pages 89-94; Activity 9, Pages 59-64; Activity 12, Pages 101-110;

**S8. Scientific Investigation**

**S8a. Demonstrate scientific competence by completing a controlled experiment.**

<i>SCIENCE STANDARD</i> <i>By the end of grade eight,</i> <i>students know and are able to:</i>	<i>DELTA SCIENCE MODULE II</i>	<i>PAGE NUMBER(S)</i>
During the course of a year, complete <i>a controlled experiment</i> .		The Delta Science Modules are designed to guide students to plan and conduct simple to more complex experiments. The following examples are found in the Delta Science Modules that are appropriate for Grades 5-8.

	<u><b>Animal Behavior</b></u>  <u><b>Food Chains and Webs</b></u>  <u><b>Insect Life</b></u>  <u><b>Powders and Crystals</b></u>  <u><b>Water Cycle</b></u>  <u><b>Weather Instruments</b></u>  <u><b>Electromagnetism</b></u>  <u><b>Fungi-Small Wonders</b></u>  <u><b>Lenses and Mirrors</b></u>  <u><b>Pollution</b></u>  <u><b>Pond Life</b></u>  <u><b>Solar Energy</b></u>  <u><b>Chemical Interactions</b></u>  <u><b>Plants in Our World</b></u>	<p>This module is designed around teaching students to design experiments to learn about mealworm behavior. They learn about asking questions and pursuing answers in controlled experiments.</p> <p>Activity 3, Pages 21-26;</p> <p>Activity 8, Pages 55-60;</p> <p>Activity 5, Pages 35-42; Activity 6, Pages 43-48; Activity 7, Pages 49-54; Activity 8, Pages 55-62; Activity 9, Pages 63-70;</p> <p>Activity 12, Pages 87-94;</p> <p>Activity 7, Pages 47-54;</p> <p>Activity 6, Pages 31-36;</p> <p>Activity 5, Pages 31-36; Activity 7, Pages 45-50; Activity 11, Pages 69-74;</p> <p>Activity 12, Pages 89-94;</p> <p>Activity 10, Pages 65-70;</p> <p>Activity 9, Pages 63-68; Activity 10, Pages 69-74; Activity 12, Pages 81-86;</p> <p>Activity 9, Pages 59-64;</p> <p>Activity 12, Pages 87-92;</p> <p>Activity 5, Pages 31-36;</p>
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**S8b. Demonstrates competence by completing fieldwork.**

<b>SCIENCE STANDARD</b> <i>By the end of grade eight, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
During the course of a year, complete <i>fieldwork</i> .	<u><b>Insect Life</b></u>	Several Delta Science Modules give students opportunities to do field studies however extensive fieldwork would be by the design of the teacher and student. Examples of field studies include:  Activity 4, Pages 29-34;

	<b><u>Small Things and Microscopes</u></b>	Activity 10, Pages 61-66;
	<b><u>Pollution</u></b>	Activity 1, Pages 7-12
	<b><u>Pond Life</u></b>	Activity 3, Pages 19-26;
	<b><u>Rocks and Minerals</u></b>	Activity 12, Pages 81-86;

**S8c. Demonstrates scientific competency by completing a design.**

<b>SCIENCE STANDARD</b> <i>By the end of grade eight, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
During the course of a year, complete <i>a design</i> .	<p><b><u>Insect Life</u></b></p> <p><b><u>Solar System</u></b></p> <p><b><u>Water Cycle</u></b></p> <p><b><u>Measuring</u></b></p> <p><b><u>Earth Movements</u></b></p> <p><b><u>Weather Watching</u></b></p> <p><b><u>Lenses and Mirrors</u></b></p> <p><b><u>Solar Energy</u></b></p>	<p>Throughout the Delta Science Module II Program, students create and use models to help them understand or demonstrate their mastery of science concepts. The following are a few examples:</p> <p>Activity 1, Pages 7-14;</p> <p>Activity 2, Pages 15-20; Activity 12, Pages 93-102;</p> <p>Activity 9, Pages 67-72; Activity 12, Pages 87-94;</p> <p>Activity 11, Pages 79-86;</p> <p>Activity 1, Pages 7-12; Activity 2, Pages 13-18; Activity 3, Pages 19-26;</p> <p>Activity 8, Pages 61-68; Activity 9, Pages 69-78;</p> <p>Activity 12, Pages 89-94;</p> <p>Activity 9, Pages 59-64;</p>

**S8d. Demonstrates scientific competence by completing secondary research.**

<b>SCIENCE STANDARD</b> <i>By the end of grade eight, students know and are able to:</i>	<b>DELTA SCIENCE MODULE II</b>	<b>PAGE NUMBER(S)</b>
During the course of a year, complete <i>secondary research</i> , <i>such as use of others' data</i> .		