DSM II™

DELTA SCIENCE MODULES II

CORRELATION TO

HARCOURT SCIENCE

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Harcourt Science
Grade Kindergarten

SCIENCE PROCESS SKILLS

The Delta Science Modules II Program is inquiry based. The fundamentals of scientific inquiry are embedded in all modules and opportunities for guided and independent inquiry are provided. Examples of activities and investigations that emphasize a skill are listed. A citation does not reflect all of the investigations or activities from the program that might address a particular skill.

SCIENCE PROCESS SKILL	*DSM II*
Observe	**Sunshine and Shadows,** Activity 5, 7, 11 **From Seed to Plant**, Activity 1, 3-5, 13 **Observing an Aquarium**, Activity 3-6, 8, 9
Compare	**Finding the Moon**, Activity 2, 4 **Investigating Water**, Activity 6-8 **Observing an Aquarium**, Activity 3, 5, 6, 10
Classify/Order	**Finding the Moon**, Activity 9 **Properties**, Activity 2, 3, 5-7, 12 **Investigating Water**, Activity 5
Gather, Record, Display, or Interpret Data	**Sunshine and Shadows**, Activity 4, 6, 7 **From Seed to Plant**, Activity 3, 4, 6, 7 **Investigating Water**, Activity 9-12
Use Numbers	**Sunshine and Shadows**, Activity 8 Science and Math **Finding the Moon**, Activity 5 Science and Math **Investigating Water**, Activity 2 Science and Math
Communicate	**Observing an Aquarium**, Activity 8, 9 **Properties**, Activity 4, 6, 7 **Sunshine and Shadows**, Activity 10-12
Plan and Conduct Simple Investigations	**From Seed to Plant**, Activity 6 **Observing an Aquarium**, Activity 8 **Properties**, Activity 10
Measure	**From Seed to Plant**, Activity 7 **Properties**, Activity 6 **Sunshine and Shadows**, Activity 6
Predict	**Properties**, Activity 10, 11 **Investigating Water**, Activity 5, 7, 9 **Sunshine and Shadows**, Activity 3, 7, 10
Infer	**Investigating Water**, Activity 8, 10

	From Seed to Plant, Activity 9, 11 **Sunshine and Shadows**, Activity 8, 9
Draw Conclusions	**From Seed to Plant**, Activity 2 **Observing an Aquarium**, Activity 1 **Sunshine and Shadows**, Activity 7
Use Space/Time Relationships	**Finding the Moon**, Activity 3 **Sunshine and Shadows**, Activity 6 **Investigating Water**, Activity 10
Formulate or Use Models	**Finding the Moon**, Activity 2 **Observing an Aquarium**, Activity 2 **From Seed to Plant**, Activity 13
Form a Hypothesis	**Finding the Moon**, Activity 7 **Investigating Water**, Activity 10 **Properties**, Activity 10

GRADE KINDERGARTEN

Examples of investigations and activities that correlate to the lessons are listed. A citation does not reflect all of the activities or investigations from the program that might address a particular lesson.

Unit A: Animals

Animals come in a great diversity of shapes and sizes. They all have body parts that help them get food and move. The body coverings of animals protect them and help them stay warm. All animals grow and change over time.
(Concepts listed in the unit overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Living? What Is Nonliving?	**From Seed to Plant**, Activity 1 **Observing an Aquarium**, Activity 2
2. What Is an Animal?	**Observing an Aquarium**, Activity 4, 5
3. What Body Coverings Do Animals Have?	**Observing an Aquarium**, Activity 4, 5
4. What Do Animals Need?	**Observing an Aquarium**, Activity 2, 4, 5, 7
5. How Do Animals Move?	**Observing an Aquarium**, Activity 4, 5, 8, 9
6. Where Do Animals Live?	**Observing an Aquarium**, Activity 2
7. How Do Animals Grow?	**Observing an Aquarium**, Activity 10

Unit B: Plants

Many different kinds of plants are all around us every day. We can identify plants by their structures including roots, stems, leaves, and flowers. Many plants grow from seeds and they change greatly during growth. People use plants for clothing, food, and shelter.
(Concepts listed in the unit overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Some Plants?	**From Seed to Plant**, Activity 2, Activity 14 Science and Careers
2. What Are the Parts of a Plant?	**From Seed to Plant**, Activity 4, 5, 9, 10
3. How Are Leaves the Same and Different?	**From Seed to Plant**, Activity 10
4. Where Are a Plant's Seeds?	**From Seed to Plant**, Activity 2 Science Challenge Activity 3 Science Extension
5. What Do Plants Need to Grow?	**From Seed to Plant**, Activity 8, 11, 14
6. What Is the Life Cycle of a Plant?	**From Seed to Plant**, Activity 13

7. How Do Plants and Animals Help People?	**From Seed to Plant**, Activity 2 Science and Social Studies Activity 3 Science and the Arts **Observing an Aquarium**, Activity 4 Science and Careers

Unit C: Earth's Land, Air, and Water

The environment around us is made up of living things and of nonliving things including land, air, and water. We use many of the things that come from Earth including soil, rocks, and minerals to build things we need to live and move around in.
(Concepts listed in the unit overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does Earth Look?	**Finding the Moon**, Activity 2, 6
2. What Makes Up Earth's Land?	***Soil Science**, Activity 12
3. What Changes Earth's Land?	***Soil Science**, Activity 12, 12 Science Extension
4. What Can We Observe About Soil?	**Finding the Moon**, Activity 6 Science Extension ***Soil Science**, Activity 1-4
5. How Can We Sort Rocks?	**Properties**, Activity 7 Reinforcement
6. Where Do We Find Water?	**Observing an Aquarium**, Activity 1
7. How Do We Use Earth's Resources?	**From Seed to Plant**, Activity 2 ***Soil Science**, Activity 9
8. How Can We Care for Earth's Resources?	***Soil Science**, Activity 10, Activity 12 Science, Technology, and Society
	*a grade 2 unit

Unit D: Weather and Seasons

Weather changes from day to day and over longer periods of time. The seasons are regular patterns of weather change that occur every year. People can use measurements to predict what the weather will be in the near future.
(Concepts listed in the unit overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Can We Keep Track of Weather?	***Weather Watching**, Activity 2-7
2. What Are the Seasons?	***Weather Watching**, Activity 1
3. What Is Spring?	***Weather Watching**, Activity 1
4. What Is Summer?	***Weather Watching**, Activity 1
5. What Is Fall?	***Weather Watching**, Activity 1

6. What Is Winter?	*__Weather Watching__, Activity 1
7. How Can We Predict the Weather?	*__Weather Watching__, Activity 6, 12
	*a grade 2 unit

Unit E: Objects Around Us

Objects can be described in terms of the materials they are made of and their physical properties. Once you know about the physical properties of an object you can predict how that object will interact with other objects.
(Concepts listed in the unit overview are included in the lesson correlations where appropriate.)

LESSON	***DSM II***
1. What Can We Find Out About Objects?	**Properties**, Activity 1-5
2. How Can We Sort Objects?	**Properties**, Activity 3-7. 10, 11
3. How Can We Describe the Position of Objects?	**Properties**, Activity 8-10
4. How Can Objects Change?	**Properties**, Activity 7-9 **Investigating Water**, Activity 2-4, 6, 7
5. Why Do Objects Make Shadows?	**Sunshine and Shadows**, Activity 1, 3-6 **Finding the Moon**, Activity 5
6. How Do Objects Move?	**Properties**, Activity 7 **Investigating Water**, Activity 2, 12
7. Which Objects Do Magnets Move?	**Properties**, Activity 11

Unit F: Investigating Water

Water can be a solid, liquid, or gas. Under the right conditions it can change from a solid to a liquid and back to a solid again. Objects interact with water in different ways-some objects sink, while others float.
(Concepts listed in the unit overview are included in th*e lesson correlations where appropriate.)*

LESSON	*DSM II*
1. How Does Water Move?	**Investigating Water**, Activity 2, 3
2. What Is Water Like?	**Investigating Water**, Activity 1, 2, 4 **Properties**, Activity 8
3. Which Objects Sink? Which Objects Float?	**Investigating Water**, Activity 5 **Properties**, Activity 10
4. How Does Water Change Objects?	**Investigating Water**, Activity 6, 7
5. How Does Water Change?	**Investigating Water**, Activity 9-11

Harcourt Science
Grade One

SCIENCE PROCESS SKILLS

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SCIENCE PROCESS SKILL	*DSM II*
Observe	**Sunshine and Shadows,** Activity 5, 7, 11 **From Seed to Plant**, Activity 1, 3-5, 13 **Observing an Aquarium**, Activity 3-6, 8, 9
Compare	**Finding the Moon**, Activity 2, 4 **Investigating Water**, Activity 6-8 **Observing an Aquarium**, Activity 3, 5, 6, 10
Classify/Order	**Finding the Moon**, Activity 9 **Properties**, Activity 2, 3, 5-7, 12 **Investigating Water**, Activity 5
Gather, Record, Display, or Interpret Data	**Sunshine and Shadows**, Activity 4, 6, 7 **From Seed to Plant**, Activity 3, 4, 6, 7 **Investigating Water**, Activity 9-12
Use Numbers	**Sunshine and Shadows**, Activity 8 Science and Math **Finding the Moon**, Activity 5 Science and Math **Investigating Water**, Activity 2 Science and Math
Communicate	**Observing an Aquarium**, Activity 8, 9 **Properties**, Activity 4, 6, 7 **Sunshine and Shadows**, Activity 10-12
Plan and Conduct Simple Investigations	**From Seed to Plant**, Activity 6 **Observing an Aquarium**, Activity 8 **Properties**, Activity 10
Measure	**From Seed to Plant**, Activity 7 **Properties**, Activity 6 **Sunshine and Shadows**, Activity 6
Predict	**Properties**, Activity 10, 11 **Investigating Water**, Activity 5, 7, 9 **Sunshine and Shadows**, Activity 3, 7, 10
Infer	**Investigating Water**, Activity 8, 10 **From Seed to Plant**, Activity 9, 11 **Sunshine and Shadows**, Activity 8, 9

Draw Conclusions	**From Seed to Plant**, Activity 2 **Observing an Aquarium**, Activity 1 **Sunshine and Shadows**, Activity 7
Use Space/Time Relationships	**Finding the Moon**, Activity 3 **Sunshine and Shadows**, Activity 6 **Investigating Water**, Activity 10
Formulate or Use Models	**Finding the Moon**, Activity 2 **Observing an Aquarium**, Activity 2 **From Seed to Plant**, Activity 13
Form a Hypothesis	**Finding the Moon**, Activity 7 **Investigating Water**, Activity 10 **Properties**, Activity 10

GRADE ONE

Examples of investigations and activities that correlate to the lessons are listed. A citation does not reflect all of the activities or investigations from the program that might address a particular lesson.

UNIT A

Chapter 1: Living and Nonliving Things

The five senses help you learn and group things as living or nonliving.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do My Senses Help Me Learn?	**Properties**, Activity 3-5 ***Using Your Senses**, Activity 1, 2, 5, 8, 10
2. What Are Living and Nonliving Things?	**From Seed to Plant**, Activity 1 **Observing an Aquarium**, Activity 2 *a grade 2 unit

Chapter 2: All About Plants

Plants have parts that enable them to grow and survive.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Parts of a Plant?	**From Seed to Plant**, Activity 4, 5, 9, 10
2. How Do Plants Grow?	**From Seed to Plant**, Activity 2-5, 7, 13
3. What Do Plants Need?	**From Seed to Plant**, Activity2, 8, 11, 14

Chapter 3: All About Animals

Animals can be classified into groups based on their physical characteristics. All animals have similar basic needs and grow and develop through predicable life cycles.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Do Animals Need?	**Observing an Aquarium**, Activity 2, 4, 5, 7
2. What Are Some Kinds of Animals?	**Observing an Aquarium**, Activity 4, 5
3. What Are Insects?	***Butterflies and Moths**, Activity 9, 12 ***Plant and Animal Populations**, Activity 4-6
4. How Do Animals Grow?	**Observing an Aquarium**, Activity 10 ***Butterflies and Moths**, Activity 1, 6, 9, 11
5. How Does a Butterfly Grow?	***Butterflies and Moths**, Activity 1, 6, 9, 11

6. How Does a Frog Grow?	*__Butterflies and Moths__, Activity 9 Science Challenge *a grade 2 unit

UNIT B

Chapter 1: Plants and Animals Need One Another

Plants and animals are interdependent.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Animals Need Plants	**Observing an Aquarium,** Activity 5, 7
2. How Do Animals Help Plants?	**From Seed to Plant**, Activity 2 Science Challenge *__Soil Science__, Activity 9
3. How Do We Need Plants and Animals?	**From Seed to Plant,** Activity 2 Science and Social Studies Activity 3 Science and the Arts **Observing an Aquarium**, Activity 4 Science Careers *a grade 2 unit

Chapter 2: A Place To Live

Ecosystems are characterized by nonliving factors such as climate and landforms and by the living things that inhabit them.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Lives in a Forest?	
2. What Lives in the Desert?	
3. What Lives in a Rain Forest?	
4. What Lives in the Ocean?	

UNIT C

Chapter 1: Earth's Land

Rocks have many observable and unique properties, and fossils teach us about the past.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Can We Observe About Rocks?	**Properties**, Activity 7 Reinforcement *__Earth Movements__. Activity 3
2. What Are Fossils?	*__Dinosaur Classification__, Activity 2
3. What Have We Learned from Fossils?	*__Dinosaur Classification__ , Activity 2, 3
	* a grade 3 unit

Chapter 2: Our Natural Resources

People use and must protect Earth's natural resources.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Natural Resources?	**Observing an Aquarium**, Activity 1 *__Soil Science__, Activity 9
2. Where is Air on Earth?	*__Amazing Air__, Activity 1, 2 Science Challenge
3. Where is Fresh Water Found?	**Observing an Aquarium**, Activity 1
4. How Can People Take Care of Resources?	***Soils Science**, Activity 10 Activity 12 Science, Technology, and Society * a grade 2 unit

UNIT D

Chapter 1: Measuring Weather

Weather conditions change from day to day.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What is Weather?	*__Weather Watching__, Activity 1
2. What is Temperature?	*__Weather Watching__, Activity 2, 3
3. What is Wind?	*__Weather Watching__, Activity 4, 5
4. What Makes Clouds and Rain?	*__Weather Watching__, Activity 6, 7 *A grade 2 unit

Chapter 2: The Sky and the Seasons

The sky has objects that can be seen during day or night. Weather conditions change seasonally. Plants and animals react to seasonal change in predicable ways.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Can We See in the Sky?	**Finding the Moon**, Activity 1, 3 **Sunshine and Shadows**, Activity 6
2. Why Do We Have Day and Night?	**Finding the Moon**, Activity 3 Science Extension
3. What is Spring?	*__Weather Watching__, Activity 1
4. What is Summer?	*__Weather Watching__, Activity 1
5. What is Fall?	*__Weather Watching__, Activity 1
6. What is Winter?	*__Weather Watching__, Activity 1
	* a grade 2 unit

UNIT E

Chapter 1: Investigate Matter

Matter can be observed, described, and classified. Matter exists as a solid, liquid, or gas and can change from one form to another. When matter changes form, no mass is gained or lost.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Can We Observe About Solids?	**Properties**, Activity 7
2. What Can We Observe About Liquids?	**Properties**, Activity 8 **Investigating Water**, Activity 1, 2
3. What Objects Sink or Float?	**Properties**, Activity 10 **Investigating Water**, Activity 5
4. What Solids Dissolve in Liquids?	**Investigating Water**, Activity 7
5. What Can We Observe About Gases?	**Properties**, Activity 9 **Investigating Water**, Activity 10, 11
6. How Can We Change Objects?	**Properties**, Activity 7-9 **Investigating Water**, Activity 6, 7, 9

Chapter 2: Making Sound

Everything you hear is a sound. Sound is all around you. Some sounds are quiet, and some are loud. Some sounds are high, and others are low. Many of these sounds can be made by musical instruments.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Sounds?	*__Using Your Senses__, Activity 5
2. How Are Sounds Different?	*__Using Your Senses__, Activity 6
3. What Sounds Do Instruments Make?	*__Using Your Senses__, Activity 6, Activity 6 Science and the Arts
	* A grade 2 unit

UNIT F

Chapter 1: Pushes and Pulls

Pushes and pulls make things move or stop moving. Wheels and the type of surface on which an object rests can affect how the object moves.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Makes Things Move?	__Properties__, Activity 11 __Investigating Water__, Activity 2, 3 *__Force and Motion__, Activity 1, 2
2. What Are Some Ways Things Move?	__Sunshine and Shadows__, Activity 4, 6, 7 __Investigating Water__, Activity 2, 3 *__Forces and Motion__, Activity 3, 5-8
3. Why Do Things Move the Way They Do?	__Investigating Water__, Activity 3 __Finding the Moon__, Activity 3 __Sunshine and Shadows__, Activity 6, 7
4. How Do Objects Move on Surfaces?	__Investigating Water__, Activity 3 Science Extension *__Force and Motion__, Activity 4 Science and Math
5. How Do Wheels Help Objects Move?	*__Force and Motion__, Activity 5, 6
	* a grade 2 unit

Chapter 2: Magnets

Magnets can pull objects that contain iron.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Magnets?	**Properties**, Activity 11 *__Magnets__, Activity 1, 2
2. What Are the Poles of a Magnet?	*__Magnets__, Activity 6
3. What Can a Magnet Pull Through?	*__Magnets__, Activity 3
4. How Can You Make a Magnet?	*__Magnets__, Activity 8-10
	* a grade 3 unit

Harcourt Science
Grade Two

SCIENCE PROCESS SKILLS

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SCIENCE PROCESS SKILL	*DSM II*
Observe	**Butterflies and Moths.** Activity 2, 11 **Using Your Senses,** Activity 1, 2 **Soil Science,** Activity 1, 2
Compare	**Classroom Plants**, Activity 8 **Plant and Animal Populations**, Activity 2 **Sink or Float**, Activity 4
Classify/Order	**Weather Watching**, Activity 6 **Length and Capacity**, Activity 1-3 **Force and Motion**, Activity 12
Gather, Record, Display, or Interpret Data	**Sink or Float**, Activity 2, 3 **Force and Motion**, Activity 2 **States of Matter**, Activity 11
Use Numbers	**Length and Capacity**, Activity 6, 11 **Force and Motion**, Activity 3, 4, 7 **Plant and Animal Populations**, Activity 8
Communicate	**Amazing Air**, Activity 8 **States of Matter**, Activity 11 **Weather Watching**, Activity 3
Plan and Conduct Simple Investigations	**Sink or Float**, Activity 7 **Soil Science**, Activity 10 **Amazing Air**, Activity 12
Measure	**Length and Capacity**, Activity 5, 6, 10, 11 **States of Matter**, Activity 7 **Using Your Senses**, Activity 2
Predict	**Amazing Air**, Activity 3 **Sink or Float**, Activity 1 **Plant and Animal Populations**, Activity 10, 11
Infer	**States of Matter**, Activity 7 **Soil Science**, Activity 1, 4 **Amazing Air**, Activity 2, 9

Draw Conclusions	**Sink or Float**, Activity 4 **States of Matter**, Activity 11 **Classroom Plants**, Activity 10
Use Space/Time Relationships	**Soil Science**, Activity 12 **Weather Watching**, Activity 6 **Butterflies and Moths**, Activity 6, 9, 11
Formulate or Use Models	**Amazing Air**, Activity 12 **Soil Science**, Activity 6, 12 **Weather Watching**, Activity 12
Form a Hypothesis	**Plant and Animal Populations**, Activity 9 **Sink or Float**, Activity 12 Science Challenge **Soil Science**, Activity 12

GRADE TWO

UNIT A

Chapter 1: Plants Grow and Change

Plants have structures (roots, stems, and leaves) that enable them to live and grow.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Living and Nonliving Things?	*__Observing an Aquarium__, Activity 2 *__From Seed to Plant__, Activity 1
2. How Do Plants Grow and Change?	__Plant and Animal Populations__, Activity 2 __Classroom Plants__, Activity 3-5, 10
3. How Are Plants Alike and Different?	__Plant and Animal Populations__, Activity 3 __Classroom Plants__, Activity 6-12
	* a grade 1 unit

Chapter 2: Animals Grow and Change

Animals can be classified by their physical characteristics. All animals develop through predicable life cycles.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Are Animals Alike and Different?	__Butterflies and Moths__, Activity 12 __Plant and Animal Populations__, Activity 4-7
2. What Are Some Animal Life Cycles?	__Butterflies and Moths__, Activity 1, 6, 9, 11 __Plant and Animal Populations__, Activity 5

Chapter 3: People Grow and Change

People have body systems that enable them to live and grow.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Will I Grow?	
2. What Do My Bones and Muscles Do?	
3. How Do My Hearts and Lungs Work?	
4. How Do I Digest Food	

UNIT B

Chapter 1: Habitats For Plants and Animals

A habitat is a place where plants and animals live and meet their needs.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is a Habitat?	**Plant and Animal Populations**, Activity 4
2. What Are Different Land Habitats?	**Plant and Animal Populations**, Activity 3 Activity 3 Science Extension
3. What Are Different Water Habitats?	**Plant and Animal Populations**, Activity 11 Activity 11 Science and Language Arts
4. What Are Some Animal Adaptations?	**Butterflies and Moths**, Activity 2, 3, 6-8, 10 **Plant and Animal Populations**, Activity 4-7, 10, 11
5. How Do Plants and Animals Help Each Other?	**Classroom Plants**, Activity 9 Activity 9, Science Extension **Plant and Animal Populations**, Activity 6, 7, 10-12 **Soil Science**, Activity 9

Chapter 2: Changes in Habitats

Habitats can be changed by weather conditions and pollution. People can prevent or reverse the negative effects of pollution.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does Weather Change Habitats?	**Soil Science**, Activity 12 Science Extension
2. How Does Pollution Change Environments?	**Soil Science**, Activity 11 Activity 11 Science, Technology, And Society **Plant and Animal Populations**, Activity 7 Science, Technology, and Society
3. How Do People Help the Environment?	**Plant and Animal Populations**, Activity 10 Science, Technology, and Society **Classroom Plants**, Activity 6 Science, Technology, and Society **Soil Science**, Activity 12 Science, Technology, and Society

UNIT C

People use natural resources such as rocks, soils, plants, and water to meet their needs.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do People Use Rocks and Soil?	**Soil Science**, Activity 7 Science and Social Studies Science, Technology, and Society Activity 8 ***Earth Movements**, Activity 3 Science and Health
2. How Do People Use Plants?	**Classroom Plants**, Activity 6 Science and Social Studies Activity 8 Science and Social Studies Science Careers
3. How Do People Use Water?	**Classroom Plants**, Activity 4, 5 ***Water Cycle**, Activity 2 Science Careers Activity 11 Science and Math *a grade 3 unit

Chapter 2: Earth Long Ago

Fossils are the preserved remains or impressions of plants and animals that lived millions of years ago.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is a Fossil?	***Dinosaur Classification**, Activity 2 ***Earth Movements**, Activity 3 Activity 3 Science Extension
2. What Have Scientists Learned from Fossils?	***Dinosaur Classification**, Activity 2, 3 ***Earth Movements**, Activity 3
3. What Have Scientists Learned About Dinosaurs?	***Dinosaur Classification**, Activity 1-3 *a grade 3 unit

UNIT D

Chapter 1: The Solar System

The sun, the moon, and stars are observable objects located beyond Earth's atmosphere.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Stars and Planets?	***Solar System**, Activity 1, 2, 6, 8, 11, 12
2. What Causes Day and Night?	***Solar System**, Activity 9
3. What Causes the Seasons?	***Solar System**, Activity 9 Science Challenge
4. How Does the Moon Move and Change?	****Finding the Moon**, Activity 3, 4, 9, 10
	*a grade 3 unit **a grade 1 unit

Chapter 2: Earth's Weather

Weather conditions such as temperature and rainfall are constantly changing. The effects of these changes can be observed and measured.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does Weather Change?	**Weather Watching**, Activity 1, 3-7, 12
2. What Is the Water Cycle?	**States of Matter**, Activity 8-10 Activity 9 Science Extension ***Water Cycle**, Activity 9, 11-13
3. How Do We Measure Weather Conditions?	**Weather Watching**, Activity 2-7
4.	
5. How Can We Prepare for Weather?	**Weather Watching**, Activity 8-10
	*a grade 3 unit

UNIT E

Chapter 1: Observing and Measuring Matter

Matter has observable properties, such as color, size, texture, and shape, and usually exists as a solid, liquid, or gas.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Matter?	**States of Matter**, Activity 1-3
2. What Can We Find Out About Solids?	**States of Matter**, Activity 1, 4, 7
3. What Can We Find Out About Liquids?	**States of Matter**, Activity 2, 4

4. What Can We Find Out About Gases?	**Amazing Air**, Activity 1-7 **States of Matter**, Activity 3

Chapter 2: Changes in Matter

Matter can change from one form to another. Matter can be mixed, but the individual properties that make up the matter do not change. Matter can change in reversible and irreversible ways.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Happens When You Mix Matter?	**States of Matter**, Activity 1 Science Extension **Soil Science**, Activity 2, 7
2. How Can Water Change?	**States of Matter**, Activity 4, 7-10
3. What Other Ways Does Matter Change?	**States of Matter**, Activity 12 **Soil Science**, Activity 5, 6 **Sink or Float**, Activity 7

UNIT F

Chapter 1: Forces and Motion

Forces-pushes and pulls-cause a change in the motion of objects. Gravity and magnetism are forces that pull on certain objects.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Forces?	**Force and Motion**, Activity 1
2. How Do Magnets Work?	***Magnets**, Activity 1-6, 11
3. How Can We Measure Motion?	**Force and Motion**, Activity 2, 5-8 **Weather Watching**, Activity 4, Activity 5 Science Extension *a grade 3 unit

Chapter 2: Hearing Sound

Sounds are produced by vibrations and vary in volume and pitch.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What is Sound?	**Using Your Senses**, Activity 5 *__Sound__, Activity 1, 2
2. How Do Sounds Vary?	**Using Your Senses**, Activity 6 *__Sound__, Activity 1, 2, 7-11
3. How Does Sound Travel?	**Using Your Senses**, Activity 5, Activity 5 Science Extension *__Sound__, Activity 3, 4
4. How Can we Make Different Sounds?	**Using Your Senses**, Activity 6 *__Sound__, Activity 7-11 *a grade 3 unit

Harcourt Science
Grade Three

SCIENCE PROCESS SKILLS

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SCIENCE PROCESS SKILL	*DSM II*
Observe	**Food Chains and Webs.** Activity 4-7 **Magnets,** Activity 1, 2, 5 **Soil Science,** Activity 1, 2
Compare	**Classroom Plants**, Activity 8 **Sound**, Activity 5, 10 **Small Things and Microscopes**, Activity 3, 4
Classify/Order	**Dinosaur Classification**, Activity 9, 10 **Length and Capacity**, Activity 1-3 **Insect Life**, Activity 6
Gather, Record, Display, or Interpret Data	**Sink or Float**, Activity 2, 3 **Powders and Crystals**, Activity 12 **Electrical Circuits**, Activity 7
Use Numbers	**Weather Instruments**, Activity 5, 12 **Force and Motion**, Activity 3, 4, 7 **Dinosaur Classification**, Activity 6, 7
Communicate	**Amazing Air**, Activity 8 **Earth Movements**, Activity 10, 12 **Water Cycle**, Activity 12
Plan and Conduct Experiments	**Magnets**, Activity 3, 4 **Soil Science**, Activity 10 **Insect Life**, Activity 8
Measure	**Length and Capacity**, Activity 5, 6, 10, 11 **Measuring**, Activity 1-12 **Weather instruments**, Activity 5, 6
Predict	**Elect5rical Circuits**, Activity 6 **Looking at Liquids**, Activity 3, 4 **Plant and Animal Populations**, Activity 10, 11
Infer	**States of Matter**, Activity 7 **Magnets**, Activity 10 **Sound**, Activity 8-10

Draw Conclusions	**Food Chains and Webs**, Activity 7, 8 **Earth Movements**, Activity 4 **Classroom Plants**, Activity 10
Use Space/Time Relationships	**Dinosaur Classification**, Activity 1 **Plant and Animal Life Cycles**, Activity 9, 10 **Butterflies and Moths**, Activity 6, 9, 11
Formulate or Use Models	**Solar System**, Activity 6, 8 **Earth Movements**, Activity 7, 9, 10 **Weather Watching**, Activity 12
Hypothesize	**Plant and Animal Populations**, Activity 9 **Sink or Float**, Activity 12 Science Challenge **Powders and Crystals**, Activity 12
Identify and Control Variables	**Animal Behavior**, Activity 11, 12 **Insect Life**, Activity 8 **States of Matter**, Activity 4

GRADE THREE

UNIT A

Chapter 1: Types of Plants

Plants have three basic external structures-roots, stems, and leaves-that enable them to meet their needs. Internal structures within the leaves allow plants to complete the process of photosynthesis.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is a Plant?	**Classroom Plants**, Activity 1, 5-10 **Plant and Animal Life Cycles**, Activity 2, 3, 6, 9, 11
2. What Is a Simple Plant?	**Classroom Plants**, Activity 10 Science Challenge **Plant and Animal Life Cycles**, Activity 9 Science Challenge **Small Things and Microscopes**, Activity 8 Science Extension
3. What Kinds of Plants Have Seeds?	**Classroom Plants**, Activity 2, 9 **Plant and Animal Life Cycles**, Activity 2, 3, 9
4. How Do Plants Make Food?	**Classroom Plants**, Activity 8 **Food Chains and Webs**, Activity 3

Chapter 2: Types of Animals

Animals have specific structural characteristics that enable scientists to classify them into groups.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is an Animal?	**Plant and Animal Populations**, Activity 1 **Plant and Animal Life Cycles**, Activity 11
2. What Are Mammals and Birds?	
3. What Are Amphibians, Fish, and Reptiles?	
4. How Do Animals Behave?	**Butterflies and Moths**, Activity 7, 8 **Animal Behavior**, Activity 2-12 **Food Chains and Webs**, Activity 4-7
5. What Is Extinction?	**Dinosaur Classification**, Activity 1, 1 Science Challenge

UNIT B

Chapter 1: Where Living Things Are Found

Ecosystems are dependent on both the organisms that live within them and on the temperature and rainfall of the area.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Ecosystems?	**Small Things and Microscopes**, Activity 10 Activity 10 Science and Social Studies ***Pond Life**, Activity 1, 3, 4
2. What Are Forest Ecosystems?	
3. What Are Desert Ecosystem?	
4. What Is a Grassland Ecosystem?	
5. What Are Water Ecosystems?	**Small Things and Microscopes**, Activity 10 ***Pond Life**, Activity 3, 4 *a grade 5 unit

Chapter 2: Living Things Depend on One Another

Organisms interact with and depend upon one another and their physical environment. These interactions include the flow of energy within the ecosystem.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Animals Get Food?	**Food Chains and Webs**, Activity 7-12 Activity 12 Science Extension **Insect Life**, Activity 12 **Plant and Animal Populations**, Activity 10, 11
2. What Are Food Chains?	**Food Chains and Webs**, Activity 11 **Insect life**, Activity 10, 10 Science Extension
3. What Are Food Webs?	**Food Chains and Webs**, Activity 12 **Insect Life**, Activity 10

UNIT C

Chapter 1: Minerals, Rocks, and Fossils

Earth's crust is composed of minerals and rocks. Rocks change form during the rock cycle. Fossils are found within certain rocks. These fossils provide information about changes in living organisms over time.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Minerals and Rocks?	**Earth Movements**, Activity 3, Activity 3 Science Challenge *__Rocks and Minerals__, Activity 1-10
2. How Do Rocks Form?	*__Rocks and Minerals__, Activity 2, 9, 10
3. What Are Fossils?	**Dinosaur Classification**, Activity 2, 3 **Earth Movements**, Activity 3, Activity 3 Science Extension *a grade 5 unit

Chapter 2: Forces That Shape the Land

Processes acting on Earth's surface produce changes in its landforms. These changes may be slow or rapid.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Landforms?	**Earth Movements**, Activity 9, 10 *__Erosion__, Activity 9
2. What Are Slow Landform Changes?	**Earth Movements**, Activity 7-9 *__Erosion__, Activity 9-12 **Soil Science**, Activity 6, 12
3. What Are Rapid Landform Changes?	**Earth Movements**, Activity 10, 11 *a grade 5 unit

Chapter 3: Soils

The process of weathering helps to produce soil. The addition of organic materials produces rich soils that can be used to grow crops.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	**DSM II**
1. How Do Soils Form?	**Soil Science**, Activity 5, 6 **Food Chains and Webs**, Activity 1 Science Challenge
2. How Do Soils Differ?	**Soils Science**, Activity 1-4, 7 **Food Chains and Webs**, Activity 1

3. How Can We Conserve Soil?	**Soil Science**, Activity 10, Activity 12 Science, Technology, and Society

Chapter 4: Earth's Resources

Earth's resources are used by the organisms on Earth in order to meet their needs. Some of these resources can be used, changed in form, and reused.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Resources?	**Soil Science**, Activity 1, 8 **Water Cycle**, Activity 1 ***Rocks and Minerals**, Activity 10 Science and Social Studies, Activity 11
2. What Are the Different Kinds of Resources?	**Soil Science**, Activity 1 **Water Cycle**, Activity 1 ***Rocks and Minerals**, Activity 9 Science, Technology, and Society Activity 11
3. How Can We Conserve Earth's Resources?	**Soil Science**, Activity 10 **Water Cycle**, Activity 11 Science and Math Science, Technology, and Society *a grade 5 unit

UNIT D

Chapter 1: The Water Cycle

Water is found almost everywhere on earth. Factors such as temperature and the energy from the sun work together to fuel the water cycle.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. Where Is Water Found on Earth?	**Water Cycle**, Activity 1-3
2. What Is the Water Cycle?	**Water Cycle**, Activity 4, 8, 9, 11, 13

Chapter 2: Observing Weather

The interactions of air, water, and land play an important part in our weather. Large masses of air interact, and their characteristics can be predicted.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Weather?	**Weather Instruments**, Activity 3, 4, 10, 12 **Weather Watching**, Activity 1
2. How Are Weather Conditions Measured?	**Weather Instruments**, Activity 1, 2, 4, 5, 8, 10, 11 **Weather Watching**, Activity 2-7
3. What Is a Weather Map?	**Weather Watching**, Activity 12

Chapter 3: Earth and Its Place in the Solar System

In space the planets, the sun, and other celestial bodies interact to form the solar system. Stars and other objects are found outside the solar system.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is the Solar System?	**Solar System**, Activity 1, 2, 6, 8, 10, 11
2.	
3. What Causes Earth's Seasons?	**Solar System**, Activity 9 Science Challenge **Weather Instruments**, Activity 6 Science Challenge
4. How Do the Moon and Earth Interact?	*__Finding the Moon__, Activity 3, 4, 9, 10 *a grade 1 unit

UNIT E

Chapter 1: Properties of Matter

Matter has specific properties that can be observed, described, and measured. Matter can change from one state to another without altering its composition.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Physical Properties of Matter?	**States of Matter**, Activity 1-3 **Powders and Crystals**, Activity 2-9
2. What Are Solids, Liquids, and Gases?	**States of Matter**, Activity 1-4, 7-10 **Looking at Liquids**, Activity 11
3. How Can Matter Be Measured?	**Length and Capacity**, Activity 8-12 **Measuring**, Activity 8-10 **States of Matter**, Activity 1, 2

Chapter 2: Changes in Matter

The properties of specific types of matter can be used to predict what types of changes it will undergo. Some changes, in which no new types of matter are formed, are physical. Some changes, in which new types of matter are formed, are chemical.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Physical Changes?	**Powders and Crystals**, Activity 5 **Looking at Liquids**, Activity 11 **States of Matter**, Activity 7-12
2. What Are Chemical Changes?	**Powders and Crystals**, Activity 6-9

UNIT F

Chapter 1: Energy

Energy can be stored as fuel or food. Energy can move in many ways, and it can change forms. Sunlight can be changed into food, fuel, or electricity.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Is Energy Stored?	**Electrical Circuits**, Activity 1, 2 **Classroom Plants**, Activity 8 **Food Chains and Webs**, Activity 3
2. How Does Energy Move?	**Sound**, Activity 3, 4 **Using Your Senses**, Activity 5 **Electrical Circuits**, Activity 1
3. How Can Energy Be Changed?	**Electrical Circuits**, Activity 1, 2 **Magnets**, Activity 11 **Food Chains and Webs**, Activity 11

Chapter 2: Heat

Heat is the movement of thermal energy. Thermal energy moves in predicable ways through specific objects.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Heat?	**States of Matter**, Activity 8 **Powders and Crystals**, Activity 9
2. Why Does Thermal Energy Move?	**States of Matter**, Activity 5, 8 **Powders and Crystals**, Activity 9
3. How Is Temperature Measured?	**States of Matter**, Activity 6, 7, 11 **Weather Instruments**, Activity 1, 6 **Measuring**, Activity 11, 12

Chapter 3: Forces and Motion

All movement is caused by the interactions of various forces. Simple machines allow us to change the direction of a force or the strength of a force.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Forces Cause Motion?	**Force and Motion**, Activity 1
2. What Is Work?	**Force and Motion**, Activity 2
3. What Are Simple Machines?	**Force and Motion**, Activity 3, 6-11

Harcourt Science
Grade Four

SCIENCE PROCESS SKILLS

The Delta Science Modules II Program is inquiry based. The fundamentals of scientific inquiry are embedded in all modules and opportunities for guided and independent inquiry are provided. Examples of activities and investigations that emphasize a skill are listed. A citation does not reflect all of the investigations or activities from the program that might address a particular skill.

SCIENCE PROCESS SKILL	*DSM II*
Observe	**Food Chains and Webs.** Activity 4-7 **Magnets,** Activity 1, 2, 5 **Insect Life,** Activity 2, 7
Compare	**Looking at Liquids**, Activity 5 **Sound**, Activity 5, 10 **Small Things and Microscopes**, Activity 3, 4
Classify/Order	**Dinosaur Classification**, Activity 9, 10 **Electrical Circuits**, Activity 6, 7 **Insect Life**, Activity 6
Gather, Record, Display, or Interpret Data	**Animal Behavior**, Activity 10 **Powders and Crystals**, Activity 12 **Electrical Circuits**, Activity 7
Use Numbers	**Weather Instruments**, Activity 5, 12 **Solar System**, Activity 5, 6 **Dinosaur Classification**, Activity 6, 7
Communicate	**Food Chains and Webs**, Activity 8 **Earth Movements**, Activity 10, 12 **Water Cycle**, Activity 12
Plan and Conduct Simple Investigations	**Magnets**, Activity 3, 4 **Small Things and Microscopes**, Activity 13 **Insect Life**, Activity 8
Measure	**Dinosaur Classification**, Activity 6 **Measuring**, Activity 1-12 **Weather Instruments**, Activity 5, 6
Predict	**Electrical Circuits**, Activity 6 **Looking at Liquids**, Activity 3, 4 **Water Cycle**, Activity 5
Infer	**Weather Instruments**, Activity 9 **Magnets**, Activity 10 **Sound**, Activity 8-10

Draw Conclusions	**Food Chains and Webs**, Activity 7, 8 **Earth Movements**, Activity 4 **Insect Life** , Activity 9
Use Space/Time Relationships	**Dinosaur Classification**, Activity 1 **Plant and Animal Life Cycles**, Activity 9, 10 **Earth Movements**, Activity 6
Formulate or Use Models	**Solar System**, Activity 6, 8 **Earth Movements**, Activity 7, 9, 10 **Water Cycle**, Activity 11
Hypothesize	**Food Chains and Webs**, Activity 2 **Animal Behavior**, Activity 12 **Powders and Crystals**, Activity 12
Identify and Control Variables	**Animal Behavior**, Activity 11, 12 **Insect Life**, Activity 8 **Food Chains and Webs**, Activity 2
Experiment	**Animal Behavior**, Activity 11, 12 **Insect Life**, Activity 8 **Food Chains and Webs**, Activity 2

GRADE FOUR

UNIT A

Chapter 1: Living Things

Cells are the building blocks of all living things including plants, animals, and fungi.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Cells?	**Small Things and Microscopes**, Activity 7-9
2. What Are Animals?	**Plant and Animal Life Cycles**, Activity 4, 5, 11 **Insect Life**, Activity 1, 2, 7 **Food Chains and Webs**, Activity 4-6
3. What Are Plants with Seeds?	**Plant and Animal Life Cycles**, Activity 2, 3, 6 **Food Chains and Webs**, Activity 2 ***Fungi-Small Wonders**, Activity 1
4. What Are Fungi?	**Small Things and Microscopes**, Activity 8 Science Extension ***Fungi-Small Wonders**, Activity 2, 4, 6 *a grade 5 unit

Chapter 2: Animal Growth and Adaptations

Animals have adaptations to help them meet their basic needs. These include body structures such as bird beaks and body coverings, and behaviors such as migration and hibernation.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Basic Needs of Animals?	**Insect Life**, Activity 2, 7 **Food Chains and Webs**, Activity 7-9 **Plant and Animal Life Cycles**, Activity 4, 5, 11
2. How Do Animals' Body Parts Help Them Meet Their Needs?	**Insect Life**, Activity 9, 12 **Dinosaur Classification**, Activity 8 **Food Chains and Webs**, Activity 4-6
3. How Do Animals' Behaviors Help Them Meet Their Needs?	**Food Chains and Webs**, Activity 7-9 **Insect Life**, Activity 11 **Animal Behavior**, Activity 3 Science and Language Arts Activity 11 Science, Technology, and Society

Chapter 3: Plant Growth and Adaptations

Plants have adaptations to help them meet their basic needs. These include important plant structures-roots, stems, and leaves.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Do Plants Need to Live?	**Plant and Animal Life Cycles**, Activity 1, 3, 6, 11 **Food Chains and Webs**, Activity 2, 3
2. How Do Leaves, Stems, and Roots Help Plants?	**Plant and Animal Life Cycles**, Activity 3, 6 **Food Chains and Webs**, Activity 3
3. How Do Plants Reproduce?	**Plant and Animal Life Cycles**, Activity 8, 9

Chapter 4: Human Body Systems

Organ Systems interact to help the body move and function. For example, the respiratory and circulatory systems work together to supply oxygen to body cells.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do The Skeletal and Muscular System Work?	***You and Your Body**, Activity 1-3
2. How Do the Respiratory and Circulatory Systems Work?	***You and Your Body**, Activity 4-6
3. How Do the Nervous and Digestive Systems Work?	*a grade 5 unit

UNIT B

Chapter 1: Ecosystems

Living and nonliving parts interact to form complex, diverse ecosystems such as rain forests and coral reefs.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Systems?	**Solar System**, Activity 1 **Water Cycle**, Activity 11 **Food Chains and Webs**, Activity 12
2. What Makes Up an Ecosystem?	**Small Things and Microscopes**, Activity 10, Activity 10 Science and Social Studies ***Pond Life**, Activity 1, 3, 4
3. What Are Habitats and Niches?	**Food Chains and Webs**, Activity 9 Activity 11 Science Extension ***Pond Life**, Activity 1, 3

4. What Are Tropical Rain Forests and Coral Reefs?	
5. What Are Some Saltwater Communities?	*__Oceans__, Activity 12 Science Challenge *a grade 5 unit

Chapter 2: Protecting Ecosystems

Ecosystems can change slowly over time. Understanding these changes help us understand more rapid changes caused by natural disasters and by human actions.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Kinds of Changes Occur in Ecosystems?	*__Pond Life__, Activity 3 Science Extension Activity 12 Science Challenge
2. How Do People Change Ecosystems?	__Small Things and Microscopes__, Activity 13 Science Technology, and Society __Food Chains and Webs__, Activity 12 Science, Technology, and Society __Insect Life__, Activity 4 Science and Social Studies
3. What is Conservation?	*a grade 5 unit

UNIT C

Chapter 1: Earthquakes and Volcanoes

Understanding of Earth's basic structure gives reasons for the shape of ocean floors and movement of continents. Changes of Earth's continental plates are the cause of volcanoes and earthquakes.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Layers of the Earth?	__Earth Movements__, Activity 1, 2, 6-8
2. What Causes Earthquakes?	__Earth Movements__, Activity 11
3. How Do Volcanoes Form?	__Earth movements__, Activity 10

Chapter 2: Fossils

Studying fossils helps us understand Earth's past. Identifying patterns of change of Earth's living things may help us better understand the life forms on Earth today.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Fossils Form?	**Dinosaur Classification**, Activity 2 **Earth Movements**, Activity 3
2. What Can We Learn from Fossils?	**Dinosaur Classification**, Activity 2, 3 **Earth Movements**, Activity 3
3. How Do Fossil Fuels Form?	*__Rocks and Minerals__, Activity 10 Science and Social Studies *a grade 5 unit

UNIT D

Chapter 1: Weather Conditions

Air masses form, move, and change in predicable ways. Observing these patterns of change in Earth's atmosphere is essential to weather predictions.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Makes Up Earth's Atmosphere?	*__Weather Forecasting__, Activity 1 Science Challenge
2. How Do Air Masses Affect Weather?	*__Weather Forecasting__, Activity 4 Science Extension Activity 7
3. How is Weather Predicted?	**Weather Instruments**, Activity 3, 4 *__Weather Forecasting__, Activity 2, 4, 5, 7, 10, 12 *a grade 5 unit

Chapter 2: The Oceans

Sunlight interacts with air and water to drive the water cycle. Ocean currents and tides are caused by interactions among the sun and moon, and Earth's atmosphere and ocean water.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Role Do Oceans Play in the Water Cycle? 2. What Are the Motions of Oceans? 3. What Is the Ocean Floor Like?	*__Oceans__, Activity 5 *__Oceans__, Activity 6-9 *__Oceans__, Activity 4 *a grade 5 unit

Chapter 3: Planets and Other Objects in Space

People learned how Earth and the planets move by observing constellations and patterns of change in the night sky. Telescopes and space probes have extended these observations far out into space.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Earth and Its Moon Move?	**Solar System**, Activity 2, 3, 9, 9 Science Challenge **Weather Instruments**, Activity 6 Science Challenge
2. How Do Objects Move in the Solar System?	**Solar System**, Activity 2, 3, 9
3. What Are the Planets Like?	**Solar System**, Activity 1, 6, 8
4. How Do People Study the Solar System?	**Solar System**, Activity 2 Science and Social Studies Science, Technology, and Society Activity 6 Science, Technology, and Society

UNIT E

Chapter 1: Matter and Its Changes

Mass, volume, solubility, and density are basic properties of matter. These properties of solids, liquids, and gases depend directly on the structure and arrangement of the particles that make up matter.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Three States of Matter?	**Looking at Liquids**, Activity 11 ***States of Matter**, Activity 1-4, 7
2. How Can Matter Be Measured and Compared?	**Measuring**, Activity 8-10 ***Length and Capacity**, Activity 8-12 ***States of Matter**, Activity 1, 2
3. What Are Some Useful Properties of Matter?	**Magnets**, Activity 2, 5, 8, 10 **Electrical Circuits**, Activity 6, 7 **Looking at Liquids**, Activity 12
4. What Are Chemical and Physical Changes?	**Powders and Crystals**, Activity 5-9 **Looking at Liquids**, Activity 11 ***States of Matter**, Activity 7-12 *a grade 3 unit

Chapter 2: Heat-Energy on the Move

Adding thermal energy causes melting and boiling. Convection, conduction, and radiation are part of the ways we use thermal energy every day.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does Heat Affect Matter?	**Powders and Crystals**, Activity 9 **Electrical Circuits**, Activity 11 ***States of Matter**, Activity 4, 8 ****Solar Energy**, Activity 1, 2, 13
2. How Can Thermal Energy Be Transferred?	**Powders and Crystals**, Activity 9 ***States of Matter**, Activity 5, 8 ****Solar Energy**, Activity 2
3. How Is Thermal Energy Produced and Used?	**Powders and Crystals**, Activity 9 ***States of Matter**, Activity 8
	*a grade 3 unit **a grade 5 unit

Chapter 3: Sound

Sound waves are regular patterns of change in matter. Properties of sounds can be changed in predicable ways. Sounds interact with matter in predicable ways.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	DSM II
1. What Is Sound?	**Sound**, Activity 2
2. Why Do Sounds Differ?	**Sound**, Activity 1
3. How Do Sound Waves Travel?	**Sound**, Activity 3, 4

Chapter 4: Light

Light can be reflected, refracted, and absorbed by various materials, the interaction of light with different types of objects can be predicted.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does Light Behave?	***Color and Light**, Activity 1 ***Lenses and Mirrors**, Activity 1, 3-9
2. How Are Light and Color Related?	***Color and Light**, Activity 1-7
	*a grade 5 unit

UNIT F

Chapter 1: Electricity and Magnetism

Electricity and magnetism are examples of energy in use. Magnets and electric circuits both cause motion or otherwise change surroundings. Technology uses electricity and magnetism to produce light, heat, sound, and motion.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Static Electricity?	**Electrical Circuits**, Activity 1 Science and Language Arts Activity 2 Science Challenge Science Extension
2. What Is an Electric Current?	**Electrical Circuits**, Activity 1, 2, 6, 7, 11
3. What Is a Magnet?	**Magnets**, Activity 2-6, 9
4. What is an Electromagnet?	**Magnets**, Activity 10, 11

Chapter 2: Motion-Forces at Work

Forces are part of all the motions of everyday life. The interactions among gravity, friction, and masses are a vital part of these everyday motions.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Motion?	*__Forces and Motion__, Activity 1, 2 **__Simple Machines__, Activity 1 Activity 1 Science and Social Studies
2. What Effects Do Forces Have on Objects?	*__Force and Motion__, Activity 1-3, 8, 9 **__Simple Machines__, Activity 1, 8, 9
3. What Are Some Forces in Nature?	**Magnets**, Activity 2-4 *__Force and Motion__, Activity 2 Science Challenge **__Simple Machines__, Activity 1 Science and Math Activity 1 Science and Social Studies Activity 6 *a grade 3 unit **a grade 5 unit

Chapter 3: Simple Machines

A force exerted by a person interacts with a simple machine to do work. Systems of simple machines and forces can be manipulated to solve technological problems.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does a Lever Help Us Do Work?	*__Force and Motion__, Activity 3 **__Simple Machines__, Activity 2
2. How Do a Pulley and a Wheel and Axle Help Us Do Work?	*__Force and Motion__, Activity 6, 8 **__Simple Machines__, Activity 5, 8
3. How Do Some Other Simple machines Help Us Do Work?	*__Force and Motion__, Activity 7, 9-11 **__Simple Machines__, Activity 7, 9-11
	*a grade 3 unit **a grade 5 unit

Harcourt Science
Grade Five

SCIENCE PROCESS SKILLS

The Delta Science Modules II Program is inquiry based. The fundamentals of scientific inquiry are embedded in all modules and opportunities for guided and independent inquiry are provided. Examples of activities and investigations that emphasize a skill are listed. A citation does not reflect all of the investigations or activities from the program that might address a particular skill.

SCIENCE PROCESS SKILL	*DSM II*
Observe	**Rocks and Minerals.** Activity 1,3 **Color and Light,** Activity 1, 2 **Insect Life,** Activity 2, 7
Compare	**Oceans**, Activity 1 **Pond Life**, Activity 2, 4 **Small Things and Microscopes**, Activity 3, 4
Classify/Order	**Rocks and Minerals**, Activity 4 **Weather Forecasting**, Activity 10 **Insect Life**, Activity 6
Gather, Record, Display, or Interpret Data	**Animal Behavior**, Activity 10 **Electromagnetism**, Activity 6 **Sound**, Activity 11
Use Numbers	**Simple Machines**, Activity 1 **Solar System**, Activity 5, 6 **Oceans**, Activity 3,4
Communicate	**Food Chains and Webs**, Activity 8 **Erosion**, Activity 6 **Lenses and Mirrors**, Activity 12
Plan and Conduct Simple Investigations	**Magnets**, Activity 3, 4 **Pollution**, Activity 10 **Erosion**, Activity 7
Measure	**Solar Energy**, Activity 4 **Measuring**, Activity 1-12 **Weather Forecasting**, Activity 3, 5
Predict	**Simple Machines**, Activity 4 **Looking at Liquids**, Activity 3, 4 **Color and Light**, Activity 2, 9
Infer	**Weather Instruments**, Activity 9 **Fungi-Small Wonders**, Activity 9, 10 **You and Your Body**, Activity 5

Draw Conclusions	**Electromagnetism**, Activity 5 **Earth Movements**, Activity 4 **Flight and Rocketry** , Activity 8
Use Space/Time Relationships	**Oceans**, Activity 4 **Plant and Animal Life Cycles**, Activity 9, 10 **Weather Forecasting**, Activity 8
Formulate or Use Models	**Solar System**, Activity 6, 8 **Erosion**, Activity 5 **You and Your Body**, Activity 2
Hypothesize	**Food Chains and Webs**, Activity 2 **Lenses and Mirrors**, Activity 12 **Pond Life**, Activity 12
Identify and Control Variables	**Animal Behavior**, Activity 11, 12 **Solar Energy**, Activity 6 **Pond Life**, Activity 12
Experiment	**Insect Life**, Activity 8 **Lenses and Mirrors**, Activity 12 **Fungi-Small Wonders**, Activity 7

GRADE FIVE

UNIT A

Chapter 1: From Single Cells to Body Systems

Cells are the basic units of all living things. Groups of cells with the same function interact as tissues, groups of tissues interact as organs, and groups of organs interact as body systems.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Cells, and What Do They Do?	**Small Things and Microscopes**, Activity 7-9 **Pond Life**, Activity 7
2. How Do Body Systems Transport Materials?	**You and Your Body**, Activity 4-6
3. How Do Bones, Muscles, and Nerves Work Together?	**You and Your Body**, Activity 1-3

Chapter 2: Classifying Living Things

One way scientists classify living things is by basic body structures, such as backbones for animals or transport tubes for plants.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Scientists Classify Living Things?	**Dinosaur Classification**, Activity 9, 10
2. How Are Animals Classified?	**Insect Life**, Activity 6
3. How Are Plants Classified?	**Fungi-Small Wonders**, Activity 1, 2

Chapter 3: Animal Growth and Heredity

Animals grow and reproduce as a result of cell division. Structures, called chromosomes, within cells control all life processes, including the inheritance of characteristics.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Animals Grow and Reproduce?	**Plant and Animal Life Cycles**, Activity 4, 5, 10 **Insect Life**, Activity 2, 7 ***DNA-From Genes to Proteins**, Activity 5 Science Extension
2. What Is a Life Cycle?	**Insect Life**, Activity 2, 7 **Plant and Animal Life Cycles**, Activity 4, 5, 10 **Fungi-Small Wonders**, Activity 4
3. Why Are Offspring Like Their Parents?	**Pond Life**, Activity 10 **Plant and Animal Life Cycles**, Activity 8, 10 ***DNA-From Genes to Proteins**, Activity 5 Science Extension *a grade 6 unit

Chapter 4: Plants and Their Adaptations

Plants have a variety of structures. These structures interact to help plants carry out life processes, such as reproduction. Some plants reproduce using spores, while other plants reproduce using seeds.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Functions of Roots, Stems, and Leaves?	**Plant and Animal Life Cycles**, Activity 3 *__Plants in Our World__, Activity 2, 4, 8, 9
2. How Do Plants Reproduce?	**Plant and Animal Life Cycles**, Activity 8, 9 Activity 9 Science Challenge **Fungi-Small Wonders**, Activity 4 **Pond Life**, Activity 10
3. How Do People Use Plants?	**Fungi-Small Wonders**, Activity 10, 12 **Plant and Animal Life Cycles**, Activity 11 Science and Health *__Plants in Our World__, Activity 12 *a grade 6 unit

UNIT B

Chapter 1: Cycles in Nature

The interactions of living things with their physical environment include cycles of matter. The water cycle is one of the most important cycles in nature.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Does Nature Reuse Materials?	**Water Cycle**, Activity 11, 13 **Food Chains and Webs**, Activity 8 **Plant and Animal Life Cycles**, Activity 12 *__Plants in Our World__, Activity 5, 6, 10
2. Why Is the Water Cycle Important?	**Water Cycle**, Activity 11, 13 **Oceans**, Activity 5 *a grade 6 unit

Chapter 2: Living Things Interact

Living things interact with one another. These interactions include the flow of energy through an ecosystem.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Ecosystems?	**Small Things and Microscopes**, Activity 10 Activity 10 Science and Social Studies **Pond Life**, Activity 1, 3, 4

2. How Does Energy Flow Through an Ecosystem?	**Food Chains and Webs**, Activity 12, Activity 12 Science Extension **Insect Life**, Activity 10 **Pond Life**, Activity 11 Science Challenge
3. How Do Organisms Compete and Survive in an Ecosystem?	**Food Chains and Webs**, Activity 3, 12 **Insect Life**, Activity 10 **Pond Life**, Activity 10 Science and Social Studies Activity 11
4. What Is Extinction and What Are Its Causes?	**Dinosaur Classification**, Activity1, 1 Science Challenge

Chapter 3: Biomes

Climate is probably the most important factor determining the type of natural system, or biome, of a land area. Water movement, temperature, pressure, and salinity determine the type of ecosystem found in a body of water.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Land Biomes?	
2. What Are Water Ecosystems?	**Small Things and Microscopes**, Activity 10 **Pond Life**, Activity 3-10 **Oceans**, Activity 11

Chapter 4: Protecting and Preserving Ecosystems

All ecosystems change naturally with time. Human activities also cause changes in ecosystems.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Ecosystems Change Naturally?	**Pond Life**, Activity 3 Science Extension Activity 12 Science Challenge
2. How Do People Change Ecosystems?	**Pollution**, Activity 9 Science, Technology, and Society Activity 10 Science and Social Studies **Pond Life**, Activity 7 Science, Technology, and Society Activity 11 Science, Technology, and Society
3. How Can People Treat Ecosystems More Wisely?	**Pollution**, Activity 1 Science Extension Activity 2 Science and Math Activity 4 Science, Technology, and Society
4. How Can People Help Restore Damaged Ecosystems?	**Pollution**, Activity 2, 5 Science and Social Studies Activity 6 Science, Technology, and Society

UNIT C

Chapter 1: Changes to Earth's Surface

On Earth's surface, forces such as wind, ice, waves, and running water interact to cause erosion and deposition. Within Earth, forces resulting from plate movements interact to change Earth through earthquakes, volcanoes, and mountain-building processes.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Processes Cause Landforms?	**Erosion**, Activity 1, 2, 5, 6, 9-12 **Oceans**, Activity 6 Science, Technology, and Society
2. What Causes Mountains, Volcanoes, and Earthquakes?	**Earth Movements**, Activity 1, 7-11
How Has Earth's Surface Changed?	**Earth Movements**, Activity 5-9, 12

Chapter 2: Rocks and Minerals

Processes on and within the Earth interact to produce rocks and minerals. These same processes act to change rocks from one kind to another.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Minerals?	**Rocks and Minerals**, Activity 1, 3-8
2. What Are Rocks?	**Rocks and Minerals**, Activity 2, 9-11
3. What Is the Rock Cycle?	**Rocks and Minerals**, Activity 12 Science Challenge *__Earth Processes__, Activity 4-6 *a grade 6 unit

Chapter 3: Weather and Climate

Interactions among temperature, air pressure, humidity, and wind produce weather. Climate, the average weather conditions over a long period, is affected by altitude, latitude, and geological features such as mountain ranges and large bodies of water. Short-term phenomena, such as El Nino, and human activities also affect climate.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Can You Observe and Measure Weather Conditions?	**Weather Instruments**, Activity 1-11 **Weather Forecasting**, Activity 1, 3, 5
2. What Causes Weather?	**Weather Instruments**, Activity 4 Science Challenge, **Weather Forecasting**, Activity 2, 4 Science Extension, 5, 7-10

3. What Is Climate and How Does It Change?	**Weather Instruments**, Activity 1 Science Extension

Chapter 4: Exploring the Oceans

Oceans are complex systems that interact with Earth's land, air, and living systems. They are affected by the gravitational pull of the moon and the sun.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Oceans Like?	**Oceans**, Activity 1-4
2. How Do Ocean Waters Move?	**Oceans**, Activity 6-9
3. How Do Oceans Interact with the Land?	**Oceans**, Activity 6 Science, Technology, and Society, 9, 11 **Erosion**, Activity 10
4. How Do People Explore the Oceans and Use Ocean Resources?	**Oceans**, Activity 4 Science and Math Activity 9 Science, Technology, and Society Activity 11 Science and Social Studies

UNIT D

Chapter 1: Earth, Moon, and Beyond

Since ancient times, people have studied the changing patterns in the night sky and the interactions of our closest neighbors in space-the moon and the planets.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Do Earth and the Moon Compare?	**Solar System**, Activity 2 *__Earth, Moon, and Sun__, Activity 2, 5, 10
2. What Else Is in the Solar System?	**Solar System**, Activity 1, 6, 8-10
3. How Have People Explored the Solar System?	**Solar System**, Activity 1 Science, Technology, and Society Activity 2 Science and Social Studies Activity 6 Science, Technology, and Society *a grade 6 unit

Chapter 2: The Sun and Other Stars

From Earth and from space, scientists study changes in the sun, and interactions among stars, galaxies, galactic clusters, and the universe beyond.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Features of the Sun?	**Solar Energy**, Activity 1 Science and the Arts *__Earth, Moon, and Sun__, Activity 1 Science Challenge
2. How Are Stars Classified?	*__Astronomy__, Activity 10
3. What Are Galaxies?	**Solar System**, Activity 11 *__Astronomy__, Activity 11
	*a grade 6 unit

UNIT E

Chapter 1: Matter and Its Properties

All matter has physical properties that can be observed, described, and measured. Under normal conditions, most matter exists as a solid, a liquid, or a gas.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Can Physical Properties Be Used to Identify Matter?	**Powders and Crystals**, Activity 5-12 **Rocks and Minerals**, Activity 10 **Magnets**, Activity 2
2. How Does Matter Change from One State to Another?	**Water Cycle**, Activity 4,5, 8, 12, 13 **Looking at Liquids**, Activity 11
3. How Does Matter React Chemically?	**Powders and Crystals**, Activity 6-8 ***Chemical Interactions**, Activity 11-13
	*a grade 6 unit

Chapter 2: Atoms and Elements

The units of matter can be classified by their properties. Matter can be combined, separated, and chemically altered.
(Concepts listed in the chapter overview are included in the lesso**n correlations where appropriate.)**

LESSON	***DSM II***
1. What Are Atoms and Elements?	*__Chemical Interactions__, Activity 4
2. What Are Compounds?	*__Chemical Interactions__, Activity 5, 6
	*a grade 6 unit

UNIT F

Chapter 1: Forces

Forces, such as magnetism and gravitation, interact with objects, such as Earth, to produce motion.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Forces Affect Objects on Earth Every Day?	**Magnets**, Activity 2, 5 **Electromagnetism**, Activity 1, 2 *__Newton's Toy Box__, Activity 2, 3
2. What Are Balanced and Unbalanced Forces?	**Simple Machines**, Activity 2 *__Newton's Toy Box__, Activity 4
3. What Is Work and How Is It Measured?	**Simple Machines**, Activity 1, 9
	*a grade 6 unit

Chapter 2: Motion

The laws of motion and conservation of momentum allow scientists to describe interactions between forces and predict resulting motions.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Are Motion and Speed Related?	*__Newton's Toy Box__, Activity 7-9
2. What Are the Three laws of Motion?	**Flight and Rocketry**, Activity 9, 12 *__Newton's Toy Box__, Activity 1, 3, 11, 12
3. Why Do the Planets Stay in Orbit?	**Solar System**, Activity 2
	*a grade 6 unit

Chapter 3: Forms of Energy

Although energy exists in many forms and can be changed from one form to another, it cannot be created or destroyed.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Kinetic and Potential Energy?	*__Newton's Toy Box__, Activity 8, 10
2. What Is Electric Energy?	**Electrical Circuits**, Activity 1-4, Activity 1 Science and Language Arts **Electromagnetism**, Activity 6-10
3. What Are Light and Sound Energy?	**Sound**, Activity 3 **Lenses and Mirrors**, Activity 1, 4-8
4. What Are thermal and Chemical Energy?	**Solar Energy**, Activity 1, 2

	Powders and Crystals, Activity 9 *__Chemical Interactions__, Activity 7 Science Challenge *a grade 6 unit

Chapter 4: How People Use Energy

Electric energy can be produced from a variety of natural resources, In the future, more electric energy may come from inexhaustible resources.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do People use Fossil Fuels?	**Rocks and Minerals**, Activity 10 Science, and Social Studies Activity 11
2. How Can Moving Water Generate Electricity?	**Oceans**, Activity 9 Science, Technology, and Society
3. What Other Sources of Energy Do People Use?	**Solar Energy**, Activity 10 **Earth Movements**, Activity 10 Science, Technology, and Society **Weather Instruments**, Activity 5 Science, Technology, and Society

Harcourt Science
Grade Six

SCIENCE PROCESS SKILLS

The Delta Science Modules II Program is inquiry based. The fundamentals of scientific inquiry are embedded in all modules and opportunities for guided and independent inquiry are provided. Examples of activities and investigations that emphasize a skill are listed. A citation does not reflect all of the investigations or activities from the program that might address a particular skill.

SCIENCE PROCESS SKILL	*DSM II*
Observe	**Rocks and Minerals.** Activity 1, 3 **Color and Light,** Activity 1, 2 **Famous Scientists,** Activity 1
Compare	**Oceans**, Activity 1 **Pond Life**, Activity 2, 4 **Plants in Our World**, Activity 3
Classify/Order	**Rocks and Minerals**, Activity 4 **Weather Forecasting**, Activity 10 **Astronomy**, Activity 11
Gather, Record, Display, or Interpret Data	**Chemical Interactions**, Activity 2 **Electromagnetism**, Activity 6 **Sound**, Activity 11
Use Numbers	**Simple Machines**, Activity 1 **Earth, Moon, and Sun**, Activity 4 **Oceans**, Activity 3,4
Communicate	**If Shipwrecks Could Talk**, Activity 9 **Erosion**, Activity 6 **Lenses and Mirrors**, Activity 12
Plan and Conduct Simple Investigations	**Chemical Interactions**, Activity 1 **Pollution**, Activity 10 **Erosion**, Activity 7
Measure	**Solar Energy**, Activity 4 **Newton's Toy Box**, Activity 7, 8 **Weather Forecasting**, Activity 3, 5
Predict	**Simple Machines**, Activity 4 **Electrical Connections**, Activity 10 **Color and Light**, Activity 2, 9
Infer	**Famous Scientists**, Activity 6 **Fungi-Small Wonders**, Activity 9, 10 **You and Your Body**, Activity 5

Draw Conclusions	**Electromagnetism**, Activity 5 **Chemical Interactions**, Activity 6 **Flight and Rocketry** , Activity 8
Use Space/Time Relationships	**Oceans**, Activity 4 **Earth Processes**, Activity 10 **Weather Forecasting**, Activity 8
Formulate or Use Models	**If Shipwrecks Could Talk**, Activity 4 **Erosion**, Activity 5 **You and Your Body**, Activity 2
Hypothesize	**Electrical Connections**, Activity 10 **Lenses and Mirrors**, Activity 12 **Pond Life**, Activity 12
Identify and Control Variables	**Plants in Our World**, Activity 3 **Solar Energy**, Activity 6 **Pond Life**, Activity 12
Experiment	**Chemical Interactions**, Activity 12 **Lenses and Mirrors**, Activity 12 **Fungi-Small Wonders**, Activity 7

GRADE SIX

UNIT A

Chapter 1: Cells, Genetics, and Heredity

All of the characteristics of an organism, its color, shape, size, and how it functions are dictated by a molecule that is a very small part of a very tiny cell--DNA.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Plant and Animal Cells Differ?	**Plants in Our World**, Activity 1 **DNA-From Genes to Proteins**, Activity 1, 2
2. How Do Cells Reproduce?	**DNA-From Genes to Proteins**, Activity 5 Science Extension
3. How Are Traits Inherited?	**DNA-From Genes to Proteins**, Activity 1, 2 Activity 3 Science Extension, Science Challenge Activity 5

Chapter 2: Classification

Organisms are grouped by the things they have in common: size, shape, structure. As scientists discover more about the structures of living things, classification systems change.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Kingdoms of Organisms?	*__Dinosaur Classification__, Activity 9, 10 *__Insect Life__, Activity 6
2. How Are Kingdoms Subdivided?	*__Dinosaur Classification__, Activity 9, 10
	*a grade 5 unit

UNIT B

Chapter 1: Plant Growth and Responses

The specific ways plants respond to light, touch, and gravity allow plants to adjust to changes during their lives.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Plants Meet Their Needs?	**Fungi-Small Wonders**, Activity 1, 2 **Plants in Our World**, Activity 2-11
2. How Do Plants Respond to Their Environments?	**Pond Life**, Activity 10 **Fungi-Small Wonders**, Activity 5, 7 **Plants in Our World**, Activity 3 Activity 3 Science and Social Studies

Chapter 2: Types of Plants

Plants are distinguished from one another by the structures and adaptations each plant has. Different plants have different life cycles that reflect the environments in which they grow and reproduce.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Mosses?	*__Plant and Animal Life Cycles__, Activity 9 Science Challenge
2. What Are Ferns and Gymnosperms?	*__Plant and Animal Life Cycles__, Activity 9 Science Challenge
3. How Are Angiosperms Different from Other Plants?	*__Plant and Animal Life Cycles__, Activity 8, 8 Science Challenge, Science Extension Activity 9
4. How Do Angiosperms Reproduce?	*__Plant and Animal Life Cycles__, Activity 8, 9, 9 Science Extension *a grade 5 unit

Chapter 3: Invertebrates

The structures and adaptations of vertebrates and invertebrates reflect the environments in which they live and the ways they live.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Vertebrates and Invertebrates?	**Oceans**, Activity 12
2. What Are Sponges, Cnidarians, and Worms?	**Pond Life**, Activity 8 Science Extension **Oceans**, Activity 12
3. What Are Mollusks, Arthropods, and Echinoderms?	**Pond Life**, Activity 5 Science Extension, 8 **Oceans**, Activity 11, 12

Chapter 4: Vertebrates

Vertebrates have adaptations and life cycles that reflect their modes of life.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Fish and Amphibians?	**Pond Life**, Activity 9, 9 Science Extension
2. What Are Reptiles, Birds, and Mammals?	**Pond Life**, Activity 4 Science Extension Activity 9 Science Extension

UNIT C

Chapter 1: Characteristics and Cycles

All the factors-biotic and abiotic-in an ecosystem interact both to define the system and to change it.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Characteristics of an Ecosystem?	**Pond Life**, Activity 1, 3, 4
2. What Are Some Land Ecosystems?	
3. Why Are Natural Cycles Important to Ecosystems?	**Plants in Our World**, Activity 6 Science Challenge Activity 9, 10 **Oceans**, Activity 5
4. How Do People Use Natural Resources?	**Earth Processes**, Activity 4 Science, Technology, and Society **Rocks and Minerals**, Activity 11 **Solar Energy**, Activity 10

Chapter 2: Interactions in Ecosystems

Living things interact in ways in order to obtain energy for growth and reproduction.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Organisms Get Energy?	**Plants in Our World**, Activity 8-10 **Pond Life**, Activity 11 **Fungi-Small Wonders**, Activity 2, 6
2. What Is Symbiosis?	**Fungi-Small Wonders**, Activity 5 Science Extension Activity 9 Science and Language Arts

Chapter 3: Earth's Oceans

The oceans contain important landforms and ecosystems that often affect life on land.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	**DSM II**
1. What Are the Characteristics of the Ocean Floor?	**Oceans**, Activity 4 **Earth Processes**, Activity 13
2. What Are Some Ocean Ecosystems?	**Oceans**, Activity 11

Chapter 4: Weather Changes

Factors in the atmosphere interact to make and change weather. In many cases the changes are predictable, but often they can result in dramatic, unpredictable changes.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Makes Up the Atmosphere?	**Weather Forecasting**, Activity 1 Science Challenge
2. What Are Weather Fronts?	**Weather Forecasting**, Activity 7, 8
3. How Can Weather Be Predicted?	**Weather Forecasting**, Activity 4, 5, 7, 8, 10, 11
4. What Causes Severe Storms?	**Weather Forecasting**, Activity 12

UNIT D

Chapter 1: Movement of Earth's Crust

Movements of earth's plates can result in earthquakes, volcanoes, and different configurations and locations of continents with respect to one another. While the individual changes are not predictable, the overall patterns of change are.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Earth's Layers?	**Earth Processes**, Activity 2
2. How Do Earth's Plates Move?	**Earth Processes**, Activity 11-13
3. What Causes Earthquakes and Volcanoes?	**Earth Processes**, Activity 5, 8, 10

Chapter 2: Rocks and the Rock Cycle

Rocks are changed from one kind of rock into another through ordinary processes at Earth's surface and just below it.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Igneous Rocks?	**Rocks and Minerals**, Activity 2, 10 **Earth Processes**, Activity 5
2. What Are Sedimentary Rocks?	**Rocks and Minerals**, Activity 2, 10 **Earth Processes**, Activity 4
3. What Are Metamorphic Rocks?	**Rocks and Minerals**, Activity 2, 10 **Earth Processes**, Activity 6
4. What Is the Rock Cycle?	**Rocks and Minerals**, Activity 12 Science Challenge **Earth Processes**, Activity 6

Chapter 3: Cycles in the Solar System

Years, seasons, day and night, and phases of moons and planets are all predictable results of the movements of objects in the solar system.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are the Parts of the Solar System?	*__Solar System__, Activity 1, 2, 6, 8, 10 __Earth, Moon, and Sun__, Activity 3, 4
2. What Are Planetary Cycles?	*__Solar System__, Activity 2, 9 __Earth, Moon, and Sun__, Activity 8
3. What Do Planets Have Seasons?	*__Solar System__, Activity 9 Science Challenge __Earth, Moon, and Sun__, Activity 9
4. Why Do Moons Have Phases?	__Earth, Moon, and Sun__, Activity 10
	*a grade 5 unit

Chapter 4: Exploring the Universe

Stars and galaxies change over periods of time too wide-ranging to observe directly. So scientists study space to try to infer how and why some of these changes occur.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is the Life Cycle of a Star?	__Astronomy__, Activity 10
2. What Are the Features of Galaxies?	*__Solar System__, Activity 11 __Astronomy__, Activity 11
3. How Do People Study Space?	*__Solar System__, Activity 1 Science, Technology, and Society Activity 2 Science and Social Studies __Astronomy__, Activity 9 Science, Technology, and Society Science and Language Arts
	*a grade 5 unit

UNIT E

Chapter 1: Atoms, Elements, and Compounds

Atoms are the building blocks of all matter. The observable properties of matter are dependent upon the atoms of which the matter is composed.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Makes Up an Atom?	__Chemical Interactions__, Activity 4
2. What Are the Properties of Elements?	__Chemical Interactions__, Activity 4, 5

3. What Are the States of Matter?	**Chemical Interactions**, Activity 1-3, 5 Activity 5 Science Challenge
4. What Are Some Properties of Compounds?	**Chemical Interactions**, Activity 6, 10, 12

Chapter 2: Matter-Properties and Changes

Matter interacts with other matter in ways that can produce new combinations. Sometimes the combinations can be easily separated, and sometimes they cannot.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Some Physical Properties of Matter?	**Rocks and Minerals**, Activity 1, 3-7 **Oceans**, Activity 3 **Chemical Interactions**, Activity 1
2. What Happens During a Chemical Change?	**Chemical Interactions**, Activity 11-13
3. What Are Mixtures, and How Can They Be Changed?	**Chemical Interactions**, Activity 3 **Oceans**, Activity 2

Chapter 3: Energy

Energy and the movement of energy from one place to another is often the result of the interactions of matter and waves.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Are Thermal Energy and Heat Related?	**Chemical Interactions**, Activity 2, Activity 2 Science Extension **Solar Energy**, Activity 2 **Newton's Toy Box**, Activity 10
2. How Are Magnetism and Electricity Related?	**Electromagnetism**, Activity 1-10 **Electrical Connections**, Activity 4
3. What Are Chemical and Nuclear Energy?	**Chemical Interactions**, Activity 7 Science Challenge

Chapter 4: Sound and Light

Waves carry energy that can interact with matter in predictable ways.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Are Some Properties of Waves?	**Color and Light**, Activity 1 **Oceans**, Activity 6 **Earth Processes**, Activity 8

2. What Are Some Characteristics of a Sound Wave?	**Famous Scientists**, Activity 6 *__Sound__, Activity 3, 5, 7-11
3. What Are the Characteristics of Light?	**Lenses and Mirrors**, Activity 1, 4-8 **Color and Light**, Activity 1, 4 Science Challenge *a grade 5 unit

UNIT F

Chapter 1: Forces and Motion

Speed, velocity, and changes in velocity are the result of the action of forces on objects.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. What Is Gravity?	**Famous Scientists**, Activity 3 **Newton's Toy Box**, Activity 2, 3
2. How Can You Describe Motion?	**Simple Machines**, Activity 1 **Newton's Toy Box**, Activity 1, 3, 7-9, 11
3. How Do Forces Interact?	**Simple Machines**, Activity 2, 6 **Newton's Toy Box**, Activity 7-9

Chapter 2: Machines and Work

Simple machines help make tasks easier by changing the direction of an applied force, the amount of force that needs to be applied, or both.
(Concepts listed in the chapter overview are included in the lesson correlations where appropriate.)

LESSON	*DSM II*
1. How Do Levers Help You Do Work?	**Simple Machines**, Activity 2 **Famous Scientists**, Activity 2
2. How Do Inclined Planes Help You Do Work?	**Simple Machines**, Activity 9
3. What Are Compound Machines?	**Simple Machines**, Activity 12 Science Challenge