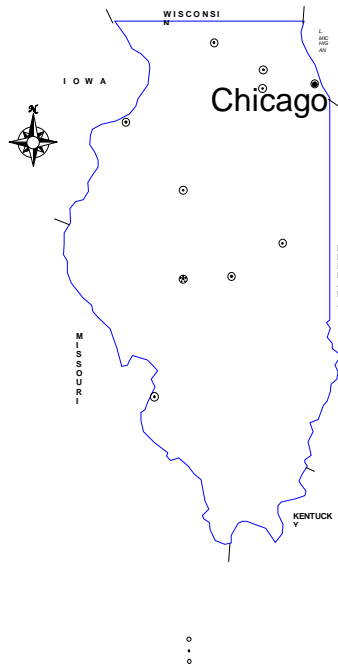




**FOSS** Full Option Science System  
(FOSS™)  
Grades K-8

Correlation to

**CHICAGO  
ACADEMIC STANDARDS**



January 2002



# Grade Kindergarten

## STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Understand that science involves asking and answering questions and comparing experimental results to what is already known.</p>	<p><b>Animals Two by Two</b> Activity 1, Parts 1-3 <b>Wood</b> Activity 1, Parts 1-3 <b>Trees</b> Activity 2, Part 2 <b>Fabric</b> Activity 2, Part 1</p>
<p>B. Design and conduct simple scientific investigations in which observations are made, data are gathered and organized, and reasonable conclusions are drawn.</p>	<p><b>Fabric</b> Activity 2, Parts 1 and 2 <b>Paper</b> Activity 1, Parts 1 and 2 <b>Wood</b> Activity 1, Parts 1 and 3 <b>Animals Two by Two</b> Activity 3, Parts 1 and 2</p>
<p>C. Understand and apply the concepts, principles, and processes of technological design.</p>	<p><b>Wood</b> Activity 2, Parts 3, 4, and 7 <b>Paper</b> Activity 3, Parts 1-4</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Compare and describe life cycles, basic needs, characteristics, and component parts of organisms.	<b>Animals Two by Two</b> Activity 1, Parts 1 and 2 Activity 2, Parts 1 and 3 <b>Trees</b> Activity 1, Parts 1 and 2 Activity 2, Parts 1 and 7
B. Understand effects of organisms on the environment and some features that help them survive and reproduce after a change in their environment.	<b>Trees</b> Activity 2, Parts 1 and 2 Activity 3, Parts 1-3 <b>Animals Two by Two</b> Activity 1, Part 4 Activity 3, Parts 1 and 3
C. Describe and compare the properties and interactions of matter and energy.	<b>Wood</b> Activity 1, Part 1 Activity 2, Parts 1 and 2 <b>Fabric</b> Activity 1, Parts 1 and 2 <b>Paper</b> Activity 1, Parts 1 and 3
D. Investigate, explain, and demonstrate characteristics of forces and motion.	<b>Wood</b> Activity 1, Parts 4 and 5 Activity 2, Parts 1 and 5 <b>Fabric</b> Activity 2, Part 2 <b>Paper</b> Activity 2, Part 2
E. Investigate, describe, and compare properties of earth's basic materials (water, air, rock) and the natural processes that change the earth's surface.	<b>Paper</b> Activity 2, Parts 1 and 2 <b>Fabric</b> Activity 2, Parts 1 and 2 <b>Wood</b> Activity 1, Part 3
F. Name and describe the main bodies of the solar system and their relationships.	

## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Identify and describe major technological changes and their effects on people, tools, and nature.	<p><b>Wood</b> Activity 2, Parts 1 and 7</p> <p><b>Paper</b> Activity 1, Part 3</p> <p><b>Fabric</b> Activity 1, Part 4</p>
B. Demonstrate understanding of conservation and the need to protect renewable and non-renewable natural resources.	<p><b>Paper</b> Activity 2, Part 2 Activity 3, Part 1</p> <p><b>Wood</b> Activity 2, Part 3</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	
D. Follow basic safety rules.	<p><b>Fabric</b> Overview, p. 9 Activity 3, p. 18</p> <p><b>Wood</b> Overview, p. 9 Activity 2, pp. 12, 43</p> <p><b>Animals Two by Two</b> Activity 1, p. 15</p>

# Grade One

## STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Understand that science involves asking and answering questions and comparing experimental results to what is already known.</p>	<p><b>Air and Weather</b> Investigation 1, Parts 2 and 4 <b>New Plants</b> Investigation 2, Part 2 Science Stories, pp. 12-17 <b>Balance and Motion</b> Investigation 2, Part 3 <b>Pebbles, Sand, and Silt</b> Investigation 4, Part 1</p>
<p>B. Design and conduct simple scientific investigations in which observations are made, data are gathered and organized, and reasonable conclusions are drawn.</p>	<p><b>Solids and Liquids</b> Investigation 4, Parts 1 and 2 <b>Balance and Motion</b> Investigation 3, Part 2 <b>Air and Weather</b> Investigation 1, Part 6 <b>Pebbles, Sand, and Silt</b> Investigation 2, Parts 1-3 Science Stories, pp. 22-23</p>
<p>C. Understand and apply the concepts, principles, and processes of technological design.</p>	<p><b>Solids and Liquids</b> Activity 1, Part 3 <b>Balance and Motion</b> Activity 3, Part 1 <b>Air and Weather</b> Activity 3, Part 3 <b>Pebbles, Sand, and Silt</b> Activity 3, Part 5</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Compare and describe life cycles, basic needs, characteristics, and component parts of organisms.	<p><b>New Plants</b> Investigation 1, Parts 2 and 3 Investigation 3, Parts 2 and 3 Science Stories, pp. 3-7</p> <p><b>Insects</b> Investigation 1, Parts 1-3 Investigation 5, Parts 1-3 Science Stories, pp. 16-21</p>
B. Understand effects of organisms on the environment and some features that help them survive and reproduce after a change in their environment.	<p><b>New Plants</b> Investigation 1, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 3-7, 18-23</p> <p><b>Insects</b> Investigation 3, Parts 1-3 Investigation 6, Part 3 Science Stories, pp. 8-11, 16-22</p>
C. Describe and compare the properties and interactions of matter and energy.	<p><b>Air and Weather</b> Investigation 1, Parts 1 and 2</p> <p><b>Pebbles, Sand, and Silt</b> Investigation 1, Part 1</p> <p><b>Solids and Liquids</b> Investigation 1, Parts 1 and 2 Investigation 2, Parts 1 and 2 Investigation 4, Science Extension, p. 29 Science Stories, pp. 1-23</p>
D. Investigate, explain, and demonstrate characteristics of forces and motion.	<p><b>Balance and Motion</b> Investigation 2, Parts 1 and 2 Investigation 3, Parts 2 and 3 Science Stories, pp. 10-13</p> <p><b>Air and Weather</b> Investigation 1, Part 6 Investigation 2, Parts 3-5</p>
E. Investigate, describe and compare properties of earth's basic materials (water, air, rocks) and the natural processes that change the earth's surface.	<p><b>Pebbles, Sand and Silt</b> Investigation 1, Parts 1 and 2 Investigation 3, Parts 1-5 Science Stories, pp. 1-21</p> <p><b>Air and Weather</b> Investigation 1, Parts 1, 2 and 5</p> <p><b>Solids and Liquids</b> Investigation 4, Parts 1 and 2</p>

F. Name and describe the main bodies of the solar system and their relationships.

**Air and Weather**  
Investigation 4, Parts 2 and 3

## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Identify and describe major technological changes and their effects on people, tools, and nature.	<p><b>Air and Weather</b> Science Stories, pp. 5-6, 14-15</p> <p><b>New Plants</b> Science Stories, pp. 4-7, 12-17</p> <p><b>Pebbles, Sand, and Silt</b> Science Stories, pp. 1-17</p> <p><b>Balance and Motion</b> Science Stories, pp. 16-17, 19</p>
B. Demonstrate understanding of conservation and the need to protect renewable and non-renewable natural resources.	<p><b>Pebbles, Sand, and Silt</b> Investigation 3, Interdisciplinary Extensions, p. 30 Investigation 4, Part 3</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	<p><b>Air and Weather</b> Investigation 3, Social Studies Extension, p. 34 Investigation 2, Interdisciplinary Extension, p. 28 Science Stories, pp. 14-17</p> <p><b>Solids and Liquids</b> Investigation 2, Language Extensions, p. 28</p> <p><b>Pebbles, Sand, and Silt</b> Investigation 3, Interdisciplinary Extension, p. 30</p>
D. Students follow basic safety rules.	<p><b>Solids and Liquids</b> Overview, p.16 Investigation 1, p.23</p> <p><b>Pebbles, Sand, and Silt</b> Overview, p. 15</p> <p><b>Air and Weather</b> Overview, p. 17 Investigation 1, pp. 22-24, 30, 35</p>

## Grade Two

### STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Understand that science involves asking and answering questions and comparing experimental results to what is already known.</p>	<p><b>Air and Weather</b> Investigation 1, Parts 2, 4 and 6</p> <p><b>New Plants</b> Investigation 2, Part 2 Science Stories, pp. 12-17</p> <p><b>Balance and Motion</b> Investigation 2, Part 3</p> <p><b>Pebbles, Sand, and Silt</b> Investigation 4, Part 1</p>
<p>B. Design and conduct simple scientific investigations in which observations are made, data are gathered and organized, and reasonable conclusions are drawn.</p>	<p><b>Solids and Liquids</b> Investigation 4, Parts 1 and 2</p> <p><b>Balance and Motion</b> Investigation 3, Part 2</p> <p><b>Air and Weather</b> Investigation 1, Part 6</p> <p><b>Pebbles, Sand, and Silt</b> Investigation 2, Parts 1-3 Science Stories, pp. 22-23</p>
<p>C. Understand and apply the concepts, principles, and processes of technological design.</p>	<p><b>Solids and Liquids</b> Activity 1, Part 3</p> <p><b>Balance and Motion</b> Activity 3, Part 1</p> <p><b>Air and Weather</b> Activity 3, Part 3</p> <p><b>Pebbles, Sand, and Silt</b> Activity 3, Part 5</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Compare and describe life cycles, basic needs, characteristics, and component parts of organisms.	<p><b>New Plants</b> Investigation 1, Parts 2 and 3 Investigation 3, Parts 2 and 3 Science Stories, pp. 3-7</p> <p><b>Insects</b> Investigation 1, Parts 1-3 Investigation 5, Parts 1-3 Science Stories, pp. 16-21</p>
B. Understand effects of organisms on the environment and some features that help them survive and reproduce after a change in their environment.	<p><b>New Plants</b> Investigation 1, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 3-7, 18-23</p> <p><b>Insects</b> Investigation 3, Parts 1-3 Investigation 6, Part 3 Science Stories, pp. 8-11, 16-22</p>
C. Describe and compare the properties and interactions of matter and energy.	<p><b>Air and Weather</b> Investigation 1, Parts 1 and 2</p> <p><b>Pebbles, Sand, and Silt</b> Investigation 1, Part 1</p> <p><b>Solids and Liquids</b> Investigation 1, Parts 1 and 2 Investigation 2, Parts 1 and 2 Investigation 4, Science Extension, p. 29 Science Stories, pp. 1-23</p>
D. Investigate, explain, and demonstrate characteristics of forces and motion.	<p><b>Balance and Motion</b> Investigation 2, Parts 1 and 2 Investigation 3, Parts 2 and 3 Science Stories, pp. 10-13</p> <p><b>Air and Weather</b> Investigation 1, Part 6 Investigation 2, Parts 3-5</p>
E. Investigate, describe and compare properties of earth's basic materials (water, air, rocks) and the natural processes that change the earth's surface.	<p><b>Pebbles, Sand and Silt</b> Investigation 1, Parts 1 and 2 Investigation 3, Parts 1-5 Science Stories, pp. 1-21</p> <p><b>Air and Weather</b> Investigation 1, Parts 1, 2 and 5</p> <p><b>Solids and Liquids</b> Investigation 4, Parts 1 and 2</p>

F. Name and describe the main bodies of the solar system and their relationships.

**Air and Weather**  
Investigation 4, Parts 2 and 3  
Investigation 2, Part 2

## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Identify and describe major technological changes and their effects on people, tools, and nature.	<p><b>Air and Weather</b> Science Stories, pp. 5-6, 14-15</p> <p><b>New Plants</b> Science Stories, pp. 4-7, 12-17</p> <p><b>Pebbles, Sand, and Silt</b> Science Stories, pp. 1-17</p> <p><b>Balance and Motion</b> Science Stories, pp. 16-17, 19</p>
B. Demonstrate understanding of conservation and the need to protect renewable and non-renewable natural resources.	<p><b>Pebbles, Sand, and Silt</b> Investigation 3, Interdisciplinary Extensions, p. 30 Investigation 4, Part 3</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	<p><b>Air and Weather</b> Investigation 3, Social Studies Extension, p. 34 Investigation 2, Interdisciplinary Extension, p. 28 Science Stories, pp. 14-17</p> <p><b>Solids and Liquids</b> Investigation 2, Language Extensions, p. 28</p> <p><b>Pebbles, Sand, and Silt</b> Investigation 3, Interdisciplinary Extension, p. 30</p>
D. Students follow basic safety rules.	<p><b>Solids and Liquids</b> Overview, p.16 Investigation 1, p.23</p> <p><b>Pebbles, Sand, and Silt</b> Overview, p. 15</p> <p><b>Air and Weather</b> Overview, p. 17 Investigation 1, pp. 22-24, 30, 35</p>

# Grade Three

## STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Understand that science involves asking and answering questions and comparing experimental results to what is already known.</p>	<p><b>Ideas and Investigations</b> Investigation 4, Part 4 <b>Structures of Life</b> Investigation 2, Parts 1 and 2 <b>Measurement</b> Investigation 3, Part 3 <b>Magnetism and Electricity</b> Investigation 1, Parts 1 and 2 Investigation 4, Parts 1 and 2</p>
<p>B. Design and conduct simple scientific investigations in which observations are made, data are gathered and organized, and reasonable conclusions are drawn.</p>	<p><b>Earth Materials</b> Investigation 3, Parts 1 and 2 <b>Human Body</b> Investigation 4, Parts 1-3 <b>Physics of Sound</b> Investigation 3, Parts 1 and 2 <b>Water</b> Investigation 2, Part 3</p>
<p>C. Understand and apply the concepts, principles, and processes of technological design.</p>	<p><b>Ideas and Inventions</b> Investigation 2, Part 3 <b>Magnetism and Electricity</b> Investigation 4, Part 1 <b>Human Body</b> Investigation 3, Parts 1-3 <b>Water</b> Investigation 2, Part 1 Investigation 4, Part 2</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Compare and describe life cycles, basic needs, characteristics, and component parts of organisms.	<p><b>Structures of Life</b> Investigation 1, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 1-3, 10-11, 17-21, 24-28 FOSS Web, Activity: Life Cycles</p> <p><b>Human Body</b> Investigation 1, Parts 1-3 Investigation 3, Parts 1-3 Science Stories, pp. 1-8, 10-16, 28-29 FOSS Web, Activity: Mr. Bones</p>
B. Understand effects of organisms on the environment and some features that help them survive and reproduce after a change in their environment.	<p><b>Structures of Life</b> Investigation 2, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 10-11, 17-19, 22-25, 28</p> <p><b>Human Body</b> Investigation 1, Part 3 Science Stories, p. 9</p> <p><b>Water</b> Science Stories, pp. 5-7</p>
C. Describe and compare the properties and interactions of matter and energy.	<p><b>Magnetism and Electricity</b> Investigation 1, Parts 1-4 Science Stories, pp. 5-9</p> <p><b>Ideas and Investigations</b> Investigation 4, Parts 1-3 Science Stories, pp. 23-26</p> <p><b>Physics of Sound</b> Investigation 1, Parts 1-3 Science Stories, pp. 5-6, 9-14, 17-21</p> <p><b>Water</b> Investigation 2, Part 3</p>
D. Investigate, explain, and demonstrate characteristics of forces and motion.	<p><b>Magnetism and Electricity</b> Investigation 2, Part 2 Science Stories, pp. 5-7, 20-24</p> <p><b>Water</b> Investigation 4, Part 2</p> <p><b>Physics of Sound</b> Investigation 2, Parts 1-3 Science Stories, pp. 9-10</p> <p><b>Human Body</b> Investigation 3, Parts 1-3</p>

<p>E. Investigate, describe and compare properties of earth's basic materials (water, air, rock) and the natural processes that change the earth's surface.</p>	<p><b>Earth Material</b>  Investigation 1, Parts 1-3  Investigation 3, Parts 1 and 2  Science Stories, pp. 1-15  FOSS Web, Rock Data base</p> <p><b>Water</b>  Investigation 1, Parts 1-3  Investigation 3, Parts 1-4  Science Stories, pp. 1-4, 8-12, 14-16  FOSS Web, Movie: Grand Canyon Rapids</p>
<p>F. Name and describe the main bodies of the solar system and their relationships.</p>	

## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Identify and describe major technological changes and their effects on people, tools, and nature.	<p><b>Water</b> Science Stories, pp. 18-20, 23</p> <p><b>Human Body</b> Science Stories, pp. 5-7 FOSS Web, Movie: MRI Section</p> <p><b>Measurement</b> Science Stories, pp. 22-23</p> <p><b>Magnetism and Electricity</b> Science Stories, pp. 10-16, 24-25 FOSS Web, Movie; How a Light Bulb Works</p>
B. Demonstrate understanding of conservation and the need to protect renewable and non-renewable natural resources.	<p><b>Water</b> Investigation 3, Language Extensions, p. 27 Science Stories, pp. 17, 21 FOSS Web, Activity: Match the Resource</p> <p><b>Measurement</b> Science Stories, pp. 16-17</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	<p><b>Magnetism and Electricity</b> Science Stories, pp. 8-9 FOSS Web, Careers</p> <p><b>Ideas and Inventions</b> Science Stories, pp. 17-22</p> <p><b>Structures of Life</b> Science Stories, pp. 6-9 FOSS Web, Careers</p> <p><b>Measurement</b> Science Stories, pp. 24-25</p>
D. Students follow basic safety rules.	<p><b>Physics of Sound</b> Overview, p.17 Investigation 2, p.10</p> <p><b>Magnetism and Electricity</b> Overview, p. 17 Investigation 2, pp. 9-11</p> <p><b>Structures of Life</b> Overview, p. 17 Investigation 3, pp. 9, 11</p> <p><b>Ideas and Inventions</b> Overview, p. 17 Investigation 2, P. 9</p>

# Grade Four

## STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Identify problems and derive solutions to demonstrate an understanding of the processes of scientific investigations.</p>	<p><b>Ideas and Investigations</b> Investigation 4, Part 4 <b>Structures of Life</b> Investigation 4, Part 4 <b>Measurement</b> Investigation 4, Part 2 <b>Magnetism and Electricity</b> Investigation 1, Parts 1 and 2 Investigation 4, Parts 1 and 2</p>
<p>B. Design and safely conduct scientific investigations to answer questions and test the validity of predictions: making observations, describing procedures, organizing data, drawing reasonable conclusions, and interpreting results.</p>	<p><b>Earth Materials</b> Investigation 3, Parts 1 and 2 <b>Human Body</b> Investigation 4, Parts 1-3 <b>Physics of Sound</b> Investigation 3, Parts 1 and 2 <b>Water</b> Investigation 3, Part 1</p>
<p>C. Know and apply the concepts, principles, and processes of technological design.</p>	<p><b>Ideas and Inventions</b> Investigation 2, Part 3 <b>Magnetism and Electricity</b> Investigation 4, Part 1 <b>Human Body</b> Investigation 3, Parts 1- 3 <b>Water</b> Investigation 2, Part 1 Investigation 4, Part 2</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Understand the general structure and function of cells in organisms.	<p><b>Structures of Life</b> Investigation 1, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 1-3, 6-11, 17-21, 24-28 FOSS Web, Activity: Life Cycles</p> <p><b>Human Body</b> Investigation 1, Parts 1-3 Investigation 3, Parts 1-3 Science Stories, pp. 1-8, 10-16, 28-29 FOSS Web, Activity: Mr. Bones</p>
B. Compare and contrast organisms by their energy use, position in food webs, structures, and adaptations to different environments.	<p><b>Structures of Life</b> Investigation 2, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 10-11, 17-19, 22-25, 28</p> <p><b>Human Body</b> Investigation 1, Part 3 Science Stories, p. 9</p> <p><b>Water</b> Science Stories, pp. 5-7</p>
C. Observe, describe, classify, measure, and compare characteristics of matter and different kinds of energy (mechanical, electrical, magnetic, light, heat, chemical).	<p><b>Magnetism and Electricity</b> Investigation 1, Parts 1-4 Science Stories, pp. 5-9</p> <p><b>Ideas and Investigations</b> Investigation 4, Parts 1-3 Science Stories, pp. 23-26</p> <p><b>Physics of Sound</b> Investigation 1, Parts 1-3 Science Stories, pp. 5-6, 9-14, 17-21</p> <p><b>Water</b> Investigation 2, Part 3</p>
D. Demonstrate and explain changes in forces and motion.	<p><b>Magnetism and Electricity</b> Investigation 2, Part 2 Science Stories, pp. 5-7, 20-24</p> <p><b>Water</b> Investigation 4, Part 2</p> <p><b>Physics of Sound</b> Investigation 2, Parts 1-3 Science Stories, pp. 9-10</p> <p><b>Human Body</b> Investigation 3, Parts 1-3</p>



## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Investigate and present ways in which science and technology have changed the tools, careers, resource use, and productivity of society over the centuries.	<p><b>Water</b> Science Stories, pp. 18-20, 23</p> <p><b>Human Body</b> Science Stories, pp. 5-7, 24 FOSS Web, Movie: Sonogram</p> <p><b>Measurement</b> Science Stories, pp. 21-23 FOSS Web, Movie: Satellites in Earth Orbit</p> <p><b>Magnetism and Electricity</b> Science Stories, pp. 10-16, 24-25 FOSS Web, Movie; How a Light Bulb Works</p>
B. Demonstrate an understanding of the need for protecting, conserving, and efficiently utilizing renewable and nonrenewable natural resources.	<p><b>Water</b> Investigation 3, Language Extensions, p. 27 Science Stories, pp. 17, 21 FOSS Web, Activity: Match the Resource</p> <p><b>Measurement</b> Science Stories, pp. 16-17</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	<p><b>Magnetism and Electricity</b> Science Stories, pp. 8-9 FOSS Web, Careers</p> <p><b>Ideas and Inventions</b> Science Stories, pp. 17-22</p> <p><b>Structures of Life</b> Science Stories, pp. 6-9 FOSS Web, Careers</p> <p><b>Measurement</b> Science Stories, pp. 24-25</p>
D. Demonstrate the ability to follow basic safety rules.	<p><b>Physics of Sound</b> Overview, p.17 Investigation 2, p.10</p> <p><b>Magnetism and Electricity</b> Overview, p. 17 Investigation 2, pp. 9-11</p> <p><b>Structures of Life</b> Overview, p. 17 Investigation 3, pp. 9, 11</p> <p><b>Ideas and Inventions</b> Overview, p. 17 Investigation 2, P. 9</p>

## Grade Five

### STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Identify problems and derive solutions to demonstrate an understanding of the processes of scientific investigations.</p>	<p><b>Models and Designs</b> Investigation 4, Parts 1 and 2</p> <p><b>Environments</b> Investigation 2, Part 4 Investigation 6, Part 3</p> <p><b>Solar Energy</b> Investigation 4, Part 4</p> <p><b>Variables</b> Investigation 1, Part 1 Investigation 2, Part 2</p>
<p>B. Design and safely conduct scientific investigations to answer questions and test the validity of predictions: making observations, describing procedures, organizing data, drawing reasonable conclusions, and interpreting results.</p>	<p><b>Levers and Pulleys</b> Investigation 3, Part 1 Investigation 4, Part 1</p> <p><b>Landforms</b> Investigation 3, Part 3</p> <p><b>Food and Nutrition</b> Investigation 4, Part 1</p> <p><b>Variables</b> Investigation 3, Part 2 FOSS Web, Activity: Blasto-The Human Cannonball</p>
<p>C. Know and apply the concepts, principles, and processes of technological design.</p>	<p><b>Models and Designs</b> Investigation 4, Part 2</p> <p><b>Variables</b> Investigation 4, Part 2 Investigation 2, Home/School Connection, p. 28</p> <p><b>Solar Energy</b> Investigation 4, Part 3</p> <p><b>Levers and Pulleys</b> Investigation 4, Science Extension, p. 27</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Understand the general structure and function of cells in organisms.	<p><b>Food and Nutrition</b> Science Stories, pp. 1, 6-8, 20</p> <p><b>Environments</b> Science Stories, pp. 43-44</p>
B. Compare and contrast organisms by their energy use, position in food webs, structures, and adaptations to different environments.	<p><b>Environments</b> Investigation 2, Parts 1-4 Investigation 3, Parts 1-3 Investigation 6, Parts 1-3 Science Stories, pp. 1-22, 27-35, 38-41 FOSS Web, Activity: Virtual Aquarium</p> <p><b>Food and Nutrition</b> Science Stories, pp. 6-9, 20</p>
C. Observe, describe, classify, measure, and compare characteristics of matter and different kinds of energy (mechanical, electrical, magnetic, light, heat, chemical).	<p><b>Solar Energy</b> Investigation 2, Parts 1 and 2 Science Stories, pp. 22-24, 26-30 FOSS Web, Activity: Solar Road Race</p> <p><b>Mixtures and Solutions</b> Investigation 4, Parts 1-3 Science Stories, pp. 1-10, 16-22, 26-30 FOSS Web, Activity: Solution or Mixture</p> <p><b>Variables</b> Investigation 3, Part 1 Science Stories, pp. 8-11</p> <p><b>Models and Designs</b> Investigation 2, Parts 1-3</p>
D. Demonstrate and explain changes in forces and motion.	<p><b>Levers and Pulleys</b> Investigation 1, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 1-17, 21-32 FOSS Web, Activity: Building a Rube Goldberg Machine</p> <p><b>Variables</b> Investigation 4, Parts 1-3 Science Stories, pp. 15-20, 29-33</p> <p><b>Models and Designs</b> Investigation 3, Parts 1-3 Investigation 4, Parts 1 and 2</p>
E. Analyze natural cycles, interactions, and patterns in the earth's land, water, and atmospheric systems.	<p><b>Environments</b> Investigation 4, Interdisciplinary Extensions, p. 23 FOSS Web, Pictures: Oxygen Cycle</p>

<p>F. Compare the composition, structure, and formation of celestial objects in space with those on the earth..</p>	<p><b>Landforms</b>  Investigation 2, Parts 1 and 2  Investigation 3, Parts 1-3  Science Stories, pp. 15-21  FOSS Web, Movie: Volcanic Eruption</p> <p><b>Solar Energy</b>  Investigation 2, Part 2  Science Stories, pp. 18-21  FOSS Web, Movie: How Weather Occurs</p> <p><b>Models and Designs</b>  Science Stories, pp. 5-10</p> <p><b>Solar Energy</b>  Science Stories, pp. 1-5, 14  FOSS Web, Picture: Solar System  FOSS Web, Activity: Lunar Calendar</p>
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## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Investigate and present ways in which science and technology have changed the tools, careers, resource use, and productivity of society over the centuries.	<p><b>Solar Energy</b> Science Stories, pp. 4-6, 22-24, 26-32</p> <p><b>Food and Nutrition</b> Science Stories, pp. 10-13, 19</p> <p><b>Models and Designs</b> Science Stories, pp. 9, 17-20, 25-28, 35-40 FOSS Web, Movie: Flight Tunnel</p> <p><b>Variables</b> Science Stories, pp. 15-20, 32-33</p>
B. Demonstrate an understanding of the need for protecting, conserving, and efficiently utilizing renewable and nonrenewable natural resources.	<p><b>Environments</b> Science Stories, pp. 36-37, 39-41</p> <p><b>Solar Energy</b> Science Stories, pp. 22-32 FOSS Web, Activity: Resource Identification</p> <p><b>Models and Designs</b> Science Stories, pp. 37-38</p> <p><b>Landforms</b> Investigation 4, Interdisciplinary Extension, p. 23 Science Stories, pp. 13-14</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	<p><b>Mixtures and Solutions</b> Science Stories, pp. 5, 9-10, 22-25, 27-30 FOSS Web, Careers</p> <p><b>Models and Designs</b> Science Stories, pp. 7, 9-10</p> <p><b>Food and Nutrition</b> Science Stories, pp. 5, 24-26 FOSS Web, Careers</p> <p><b>Variables</b> Science Stories, pp. 4-6, 12-14, 21-28</p>
D. Demonstrate the ability to follow basic safety rules.	<p><b>Mixtures and Solutions</b> Overview, p.17 Investigation 4, pp. 10-11, 21</p> <p><b>Solar Energy</b> Overview, p. 17</p> <p><b>Variables</b> Overview, p. 17 Investigation 3, p. 10</p> <p><b>Levers and pulleys</b> Overview, p. 17 Investigation 3, p. 12</p>

## Grade Six

### STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Identify problems and derive solutions to demonstrate an understanding of the processes of scientific investigations.</p>	<p><b>Models and Designs</b> Investigation 4, Parts 1 and 2</p> <p><b>Environments</b> Investigation 2, Part 4 Investigation 6, Part 3</p> <p><b>Solar Energy</b> Investigation 4, Part 4</p> <p><b>Variables</b> Investigation 1, Part 1 Investigation 2, Part 2</p>
<p>B. Design and safely conduct scientific investigations to answer questions and test the validity of predictions: making observations, describing procedures, organizing data, drawing reasonable conclusions, and interpreting results.</p>	<p><b>Levers and Pulleys</b> Investigation 3, Part 1 Investigation 4, Part 1</p> <p><b>Landforms</b> Investigation 3, Part 3</p> <p><b>Food and Nutrition</b> Investigation 4, Part 1</p> <p><b>Variables</b> Investigation 3, Part 2 FOSS Web, Activity: Blasto-The Human Cannonball</p>
<p>C. Know and apply the concepts, principles, and processes of technological design.</p>	<p><b>Models and Designs</b> Investigation 4, Part 2</p> <p><b>Variables</b> Investigation 4, Part 2 Investigation 2, Home/School Connection, p. 28</p> <p><b>Solar Energy</b> Investigation 4, Part 3</p> <p><b>Levers and Pulleys</b> Investigation 4, Science Extension, p. 27</p>

## STATE GOAL 12

**Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Understand the general structure and function of cells in organisms.	<p><b>Food and Nutrition</b> Science Stories, pp. 1, 6-8, 20</p> <p><b>Environments</b> Science Stories, pp. 43-44</p>
B. Compare and contrast organisms by their energy use, position in food webs, structures, and adaptations to different environments.	<p><b>Environments</b> Investigation 2, Parts 1-4 Investigation 3, Parts 1-3 Investigation 6, Parts 1-3 Science Stories, pp. 1-22, 27-35, 38-41 FOSS Web, Activity: Virtual Aquarium</p> <p><b>Food and Nutrition</b> Science Stories, pp. 6-9, 20</p>
C. Observe, describe, classify, measure, and compare characteristics of matter and different kinds of energy (mechanical, electrical, magnetic, light, heat, chemical).	<p><b>Solar Energy</b> Investigation 2, Parts 1 and 2 Science Stories, pp. 22-24, 26-30 FOSS Web, Activity: Solar Road Race</p> <p><b>Mixtures and Solutions</b> Investigation 4, Parts 1-3 Science Stories, pp. 1-10, 16-22, 26-30 FOSS Web, Activity: Solution or Mixture</p> <p><b>Variables</b> Investigation 3, Part 1 Science Stories, pp. 8-11</p> <p><b>Models and Designs</b> Investigation 2, Parts 1-3</p>
D. Demonstrate and explain changes in forces and motion.	<p><b>Levers and Pulleys</b> Investigation 1, Parts 1-3 Investigation 4, Parts 1 and 2 Science Stories, pp. 1-17, 21-32 FOSS Web, Activity: Building a Rube Goldberg Machine</p> <p><b>Variables</b> Investigation 4, Parts 1-3 Science Stories, pp. 15-20, 29-33</p> <p><b>Models and Designs</b> Investigation 3, Parts 1-3 Investigation 4, Parts 1 and 2</p>
E. Analyze natural cycles, interactions, and patterns in the earth's land, water, and atmospheric systems.	<p><b>Environments</b> Investigation 4, Interdisciplinary Extensions, p. 23 FOSS Web, Pictures: Oxygen Cycle</p>

<p>F. Compare the composition, structure, and formation of celestial objects in space with those on the earth..</p>	<p><b>Landforms</b>  Investigation 2, Parts 1 and 2  Investigation 3, Parts 1-3  Science Stories, pp. 15-21  FOSS Web, Movie: Volcanic Eruption</p> <p><b>Solar Energy</b>  Investigation 2, Part 2  Science Stories, pp. 18-21  FOSS Web, Movie: How Weather Occurs</p> <p><b>Models and Designs</b>  Science Stories, pp. 5-10</p> <p><b>Solar Energy</b>  Science Stories, pp. 1-5, 14  FOSS Web, Picture: Solar System  FOSS Web, Activity: Lunar Calendar</p>
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## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Investigate and present ways in which science and technology have changed the tools, careers, resource use, and productivity of society over the centuries.	<p><b>Solar Energy</b> Science Stories, pp. 4-6, 22-24, 26-32</p> <p><b>Food and Nutrition</b> Science Stories, pp. 10-13, 19</p> <p><b>Models and Designs</b> Science Stories, pp. 9, 17-20, 25-28, 35-40 FOSS Web, Movie: Flight Tunnel</p> <p><b>Variables</b> Science Stories, pp. 15-20, 32-33</p>
B. Demonstrate an understanding of the need for protecting, conserving, and efficiently utilizing renewable and nonrenewable natural resources.	<p><b>Environments</b> Science Stories, pp. 36-37, 39-41</p> <p><b>Solar Energy</b> Science Stories, pp. 22-32 FOSS Web, Activity: Resource Identification</p> <p><b>Models and Designs</b> Science Stories, pp. 37-38</p> <p><b>Landforms</b> Investigation 4, Interdisciplinary Extension, p. 23 Science Stories, pp. 13-14</p>
C. Describe historical roles of people and societies in the development of current scientific knowledge.	<p><b>Mixtures and Solutions</b> Science Stories, pp. 5, 9-10, 22-25, 27-30 FOSS Web, Careers</p> <p><b>Models and Designs</b> Science Stories, pp. 7, 9-10</p> <p><b>Food and Nutrition</b> Science Stories, pp. 5, 24-26 FOSS Web, Careers</p> <p><b>Variables</b> Science Stories, pp. 4-6, 12-14, 21-28</p>
D. Demonstrate the ability to follow basic safety rules.	<p><b>Mixtures and Solutions</b> Overview, p.17 Investigation 4, pp. 10-11, 21</p> <p><b>Solar Energy</b> Overview, p. 17</p> <p><b>Variables</b> Overview, p. 17 Investigation 3, p. 10</p> <p><b>Levers and pulleys</b> Overview, p. 17 Investigation 3, p. 12</p>

# Grade Seven

## STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

NOTE: This correlation contains references to the FOSS Middle School Courses for grades 6-8. Of the courses, Human Brain and Senses, Earth History, Planetary Science, Diversity of Life, and Electronics are completed and included fully in the correlation. The other Middle School Courses, Weather and Water, Force and Motion, Chemistry, and Populations and Ecosystems are in various stages of development and are included where their correlation is anticipated.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Analyze data, draw conclusions based on evidence, and report results accurately in a variety of formats.</p>	<p><b>Planetary Science</b> Investigation 5, Parts 2-4 <b>Earth History</b> Investigation 4, Parts 2 and 3 Investigation 8, Part 4 <b>Electronics</b> Investigation 3, Part 1 <b>Weather and Water</b> Investigation 2</p>
<p>B. Demonstrate understanding of scientific processes and apply them to experiments: stating a purpose, developing a hypothesis, designing procedures, making observations, collecting data, controlling variables, and establishing relationships based on evidence and logical argument.</p>	<p><b>Diversity of Life</b> Investigation 8, Part 2 Investigation 9, Part 2 <b>Earth History</b> Investigation 5, Parts 2-4 <b>Planetary Science</b> Investigation 4, Part 1 <b>Human Brain and Senses</b> Investigation 4, Parts 1-3</p>
<p>C. Know and apply the concepts, principles, and processes of technological design.</p>	<p><b>Electronics</b> Investigation 1, Parts 1-3 Investigation 3, Part 1 <b>Diversity of Life</b> Investigation 2, Part 1 <b>Force and Motion</b></p>

## STATE GOAL 12

### Have a working knowledge of the fundamental concepts and principles of the life, physical, and earth/space sciences and their connections.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

NOTE: This correlation contains references to the FOSS Middle School Courses for grades 6-8. Of the courses, Human Brain and Senses, Earth History, Planetary Science, Diversity of Life, and Electronics are completed and included fully in the correlation. The other Middle School Courses, Weather and Water, Force and Motion, Chemistry, and Populations and Ecosystems are in various stages of development and are included where their correlation is anticipated.

<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Analyze structures and functions of the human body, including systems of reproduction and heredity, and compare them with those of other organisms.	<p><b>Human Brain and Senses</b> Investigation 2, Parts 1-3 Investigation 8, Parts 1 and 2 Resources, pp. 29-30, 36-38, 40-46, 55-78 CD, Brain and Senses</p> <p><b>Diversity of Life</b> Investigation 8, Part 1 Investigation 9, Parts 1 and 2 Resources, pp. 27-30, 31-39, 51-54 CD, Cells and Ribbon of Life</p>
B. Explain and model the interaction and interdependence of nonliving and living components within ecosystems.	<p><b>Populations and Ecosystems</b></p>
C. Analyze qualitatively and quantitatively patterns of change in matter and energy.	<p><b>Electronics</b> Investigation 1, Parts 1-3</p> <p><b>Weather and Water</b> Investigations 2-4 Resources, Matter and Energy Resources, What is Heat CD, How Does Heat Get From One Place to Another</p> <p><b>Chemistry</b></p>
D. Investigate, analyze, and explain the characteristics of forces and motion, including uniform motions.	<p><b>Forces and Motion</b></p>
E. Analyze the properties, functions, and formation of the earth's component features.	<p><b>Earth History</b> Investigation 4, Parts 3 and 4 Investigation 7, Parts 1 and 2 Resources, pp. 73-80, 84-105 CD, Geology Lab: Earth Processes</p> <p><b>Weather and Water</b> Investigations 6, 7, and 9 Resources, Earth, The Water Planet</p>

<p>F. Describe large-scale dynamic processes occurring in the solar system and beyond.</p>	<p>CD, Water Cycle CD, Global Winds</p> <p><b>Planetary Science</b> Investigation 4, Parts 1 and 2 Investigation 9, Parts 1-4 Investigation 10, Parts 1-3 Resources, pp. 74-103 CD, Phases of the Moon CD, Notebooks: Sun, Solar System</p>
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## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

The Full Option Science System program is inquiry-based. The fundamentals of scientific inquiry are imbedded in all modules. Examples of activities and investigations are listed. A citation does not reflect all of the investigations or activities from the program that might apply.

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<i>Chicago Academic Standard</i>	<i>FOSS</i>
A. Evaluate implications of technology for societies, vocations, economies, and the environment, including trade-offs, intended benefits, unintended consequences, and constraints.	<p><b>Planetary science</b> Resources, pp. 74-79, 90-96</p> <p><b>Earth History</b> Resources, pp. 34-35, 49</p> <p><b>Diversity of Life</b> Investigation 2, Part 1 CD, Virtual Microscope</p> <p><b>Electronics</b> Investigation 3, Part 1 Resources, pp. 18-21, 34-36</p>
B. Demonstrate and evaluate civic responsibility by participating in school, home, and community conservation activities.	Local assignment and assessment
C. Recognize international contributions of scientists, including male and female persons from diverse cultures and persons with disabilities.	<p><b>Diversity of Life</b> Resources, p. 27</p> <p><b>Earth History</b> Resources, pp. 82-87, 98-99</p> <p><b>Electronics</b> Resources, pp. 23-25, 34-36</p> <p><b>Planetary Science</b> Resources, pp. 59-62, 67-68, 71-73</p>
D. Demonstrate and practice safety techniques to identify and reduce potential hazards.	<p><b>Electronics</b> Overview, P. 25 Investigation 4, pp. 144-145 CD, Workbench Safety</p> <p><b>Planetary Science</b> Overview, p. 17</p> <p><b>Human Brain and Senses</b> Overview, p. 19 Investigation 2, pp. 71, 74, 80</p> <p><b>Earth History</b> Overview, p. 19 Investigation 4, p. 151</p>

# Grade Eight

## STATE GOAL 11

**Have a working knowledge of the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**

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<i>Chicago Academic Standard</i>	<i>FOSS</i>
<p>A. Analyze data, draw conclusions based on evidence, and report results accurately in a variety of formats.</p>	<p><b>Planetary Science</b> Investigation 5, Parts 2-4</p> <p><b>Earth History</b> Investigation 4, Parts 2 and 3 Investigation 8, Part 4</p> <p><b>Electronics</b> Investigation 3, Part 1</p> <p><b>Weather and Water</b> Investigation 2</p>
<p>B. Demonstrate understanding of scientific processes and apply them to experiments: stating a purpose, developing a hypothesis, designing procedures, making observations, collecting data, controlling variables, and establishing relationships based on evidence and logical argument.</p>	<p><b>Diversity of Life</b> Investigation 8, Part 2 Investigation 9, Part 2</p> <p><b>Earth History</b> Investigation 5, Parts 2-4</p> <p><b>Planetary Science</b> Investigation 4, Part 1</p> <p><b>Human Brain and Senses</b> Investigation 4, Parts 1-3</p>
<p>C. Know and apply the concepts, principles, and processes of technological design.</p>	<p><b>Electronics</b> Investigation 1, Parts 1-3 Investigation 3, Part 1</p> <p><b>Diversity of Life</b> Investigation 2, Part 1</p> <p><b>Force and Motion</b></p>

## STATE GOAL 12

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A. Analyze structures and functions of the human body, including systems of reproduction and heredity, and compare them with those of other organisms.	<p><b>Human Brain and Senses</b> Investigation 2, Parts 1-3 Investigation 8, Parts 1 and 2 Resources, pp. 29-30, 36-38, 40-46, 55-78 CD, Brain and Senses</p> <p><b>Diversity of Life</b> Investigation 8, Part 1 Investigation 9, Parts 1 and 2 Resources, pp. 27-30, 31-39, 51-54 CD, Cells and Ribbon of Life</p>
B. Explain and model the interaction and interdependence of nonliving and living components within ecosystems.	<p><b>Populations and Ecosystems</b></p>
C. Analyze qualitatively and quantitatively patterns of change in matter and energy.	<p><b>Electronics</b> Investigation 1, Parts 1-3 Investigation 3, Parts 1 and 2</p> <p><b>Weather and Water</b> Investigations 2-4 Resources, Matter and Energy Resources, What is Heat CD, How Does Heat Get From One Place to Another</p> <p><b>Chemistry</b></p>
D. Investigate, analyze, and explain the characteristics of forces and motion, including uniform motions.	<p><b>Forces and Motion</b></p>
E. Analyze the properties, functions, and formation of the earth's component features.	<p><b>Earth History</b> Investigation 4, Parts 3 and 4 Investigation 7, Parts 1 and 2 Resources, pp. 73-80, 84-105 CD, Geology Lab: Earth Processes CD, Rock Data Base</p> <p><b>Weather and Water</b></p>

<p>F. Describe large-scale dynamic processes occurring in the solar system and beyond.</p>	<p>Investigations 6, 7, and 9 Resources, Earth, The Water Planet CD, Water Cycle CD, Global Winds</p> <p><b>Planetary Science</b> Investigation 4, Parts 1 and 2 Investigation 9, Parts 1-4 Investigation 10, Parts 1-3 Resources, pp. 74-103 CD, Phases of the Moon CD, Notebooks: Sun, Solar System</p>
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## STATE GOAL 13

### Have a working knowledge of the relationships among science, technology, and society in historical and contemporary contexts.

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B. Demonstrate and evaluate civic responsibility by participating in school, home, and community conservation activities.	Local assignment and assessment
C. Recognize international contributions of scientists, including male and female persons from diverse cultures and persons with disabilities.	<p><b>Diversity of Life</b> Resources, p. 27</p> <p><b>Earth History</b> Resources, pp. 82-87, 98-99</p> <p><b>Electronics</b> Resources, pp. 23-25, 34-36</p> <p><b>Planetary Science</b> Resources, pp. 59-62, 67-68, 71-73</p>
D. Demonstrate and practice safety techniques to identify and reduce potential hazards.	<p><b>Electronics</b> Overview, P. 25 Investigation 4, pp. 144-145 CD, Workbench Safety</p> <p><b>Planetary Science</b> Overview, p. 17</p> <p><b>Human Brain and Senses</b> Overview, p. 19 Investigation 2, pp. 71, 74, 80</p> <p><b>Earth History</b> Overview, p. 19 Investigation 4, p. 151</p>