

SRA Life, Earth, and Physical Science Laboratories
correlation to
Illinois Learning Standards: Science
Grades 6-8

SRA Life, Earth, and Physical Science Laboratories provide core science content in an alternate reading format. Each *SRA Science Lab* contains 180 Science Cards covering key science concepts and vocabulary. Each lab covers 90 different science topics presented at two different reading levels to meet varied student abilities. The *Teacher's Handbook* includes hands-on inquiry activities as well as vocabulary building exercises. The *Classroom Resource CD-ROM* includes Writing Strategies in Science along with tests and vocabulary games.

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

A. Know and apply the concepts, principles, and processes of scientific inquiry.

11.A.3a. Formulate hypotheses that can be tested by collecting data.

Life Science Lab Teacher's Handbook: Hands-On Activity 3, *Investigating Arthropods*, pages 85-87

Physical Science Lab Teacher's Handbook: Hands-On Activity 2, *Chemical Reaction Rates*, pages 81-83; Hands-On Activity 3, *Energy Conversion*, pages 85-87

Classroom Resource CD-ROM: Writing Strategy 8, 15

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

A. Know and apply the concepts, principles, and processes of scientific inquiry.

11.A.3b. Conduct scientific experiments that control all but one variable.

Life Science Lab Teacher's Handbook: Hands-On Activity 7, *The Effects of Acid Rain*, pages 101-103

Earth Science Lab Teacher's Handbook: Hands-On Activity 8, *Temperature, Salinity, and Water Density*, pages 101-103

Physical Science Lab Teacher's Handbook: Hands-On Activity 2, *Chemical Reaction Rates*, pages 81-83

Classroom Resource CD-ROM: Writing Strategy 15, 23

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

A. Know and apply the concepts, principles, and processes of scientific inquiry.

11.A.3c. Collect and record data accurately using consistent measuring and recording techniques and media.

Life Science Lab Teacher's Handbook: Hands-On Activity 3, *Investigating Arthropods*, pages 85-87; Hands-On Activity 7, *The Effects of Acid Rain*, pages 101-103

Earth Science Lab Teacher's Handbook: Hands-On Activity 1, *Identifying Minerals with the Mohs Scale*, pages 73-75; Hands-On Activity 3, *Interpreting a Topographic Map*, pages 81-83; Hands-On Activity 5, *What is in the Air?*, pages 89-91; Hands-On Activity 7, *Sizes in the Solar System*, pages 97-99; Hands-On Activity 8, *Temperature, Salinity, and Water Density*, pages 101-103

Physical Science Lab Teacher's Handbook: Hands-On Activity 1, *Measuring pH of Acids and Bases*, pages 77-79; Hands-On Activity 2, *Chemical Reaction Rates*, pages 81-83; Hands-On Activity 3, *Energy Conversion*, pages 85-87; Hands-On Activity 4, *Reducing Friction*, pages 89-91; Hands-On Activity 6, *Making Sound*, pages 97-99

Classroom Resource CD-ROM: Writing Strategy 15, 16, 24

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.
A. Know and apply the concepts, principles, and processes of scientific inquiry.
11.A.3d. Explain the existence of unexpected results in a data set.
Life Science Lab Teacher’s Handbook: Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
Earth Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
Physical Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99
Classroom Resource CD-ROM: Writing Strategy 15, 22

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.
A. Know and apply the concepts, principles, and processes of scientific inquiry.
11.A.3e. Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.
Life Science Lab Teacher’s Handbook: Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99
Earth Science Lab Teacher’s Handbook: Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83
Physical Science Lab Teacher’s Handbook: Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.
A. Know and apply the concepts, principles, and processes of scientific inquiry.
11.A.3f. Interpret and represent results of analysis to produce findings.
Life Science Lab Teacher’s Handbook: Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
Earth Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
Physical Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.
A. Know and apply the concepts, principles, and processes of scientific inquiry.
11.A.3g. Report and display the process and results of a scientific investigation.
Life Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
Earth Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i> , pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
Physical Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

State Goal 11. Understand the process of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.
B. Know and apply the concepts, principles and processes of technological design.
11.B.3a. Identify an actual design problem and establish criteria for determining the success of a solution.
11.B.3b. Sketch, propose, and compare design solutions to the problem considering available materials, tools, cost effectiveness and safety.
11.B.3c. Select the most appropriate design and build a prototype or simulation.
11.B.3d. Test the prototype using suitable materials, instruments and technology and record the data.
11.B.3e. Evaluate the test results based on established criteria, note sources of error and recommend improvements.
11.B.3f. Using available technology, report the relative success of the design based on the test results and criteria.
This concept is not covered at this level

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
A. Know and apply concepts that explain how living things function, adapt and change.
12.A.3a. Explain how cells function as “building blocks” of organisms and describe the requirements for cells to live.
Life Science Lab, Level A: Cards 1, 5, 6, 7, 8, 9, 10
Life Science Lab, Level B: Cards 1, 5, 6, 7, 8, 9, 10
Life Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
A. Know and apply concepts that explain how living things function, adapt and change.
12.A.3b. Compare characteristics of organisms produced from a single parent with those of organisms produced by two parents.
Life Science Lab, Level A: Cards 60, 61, 62, 63
Life Science Lab, Level B: Cards 60, 61, 62, 63

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
A. Know and apply concepts that explain how living things function, adapt and change.
12.A.3c. Compare and contrast how different forms and structures reflect different function (e.g., similarities and differences among animals that fly, walk, or swim; structures of plant cells and animal cells).
Life Science Lab, Level A: Cards 6, 7, 25 Life Science Lab, Level B: Cards 6, 7, 25 Life Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
B. Know and apply concepts that describe how living things interact with each other and with their environment.
12.B.3a. Identify and classify biotic and abiotic factors in an environment that affect population density, habitat and placement of organisms in an energy pyramid.
Life Science Lab, Level A: Cards 70, 72, 74, 75, 76, 77 Life Science Lab, Level B: Cards 70, 72, 74, 75, 76, 77

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
B. Know and apply concepts that describe how living things interact with each other and with their environment.
12.B.3b. Compare and assess features of organisms for their adaptive, competitive and survival potential (e.g., appendages, reproductive rates, camouflage, defensive structures).
Life Science Lab, Level A: Cards 23, 24, 41, 43, 73, 86 Life Science Lab, Level B: Cards 23, 24, 41, 43, 73, 86 Life Science Lab Teacher's Handbook: Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
C. Know and apply concepts that describe properties of matter and energy and the interactions between them.
12.C.3a. Explain interactions of energy with matter including changes of state and conservation of mass and energy.
Physical Science Lab, Level A: Cards 6, 8, 9, 12, 13, 27, 28, 29, 30, 37 Physical Science Lab, Level B: Cards 6, 8, 9, 12, 13, 27, 28, 29, 30, 37 Physical Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
C. Know and apply concepts that describe properties of matter and energy and the interactions between them.
12.C.3b. Model and describe the chemical and physical characteristics of matter (e.g., atoms, molecules, elements, compounds, mixtures).
Physical Science Lab, Level A: Cards 1, 2, 3, 4, 5, 6, 7, 11, 12, 13 Physical Science Lab, Level B: Cards 1, 2, 3, 4, 5, 6, 7, 11, 12, 13 Physical Science Lab Teacher's Handbook: Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
D. Know and apply concepts that describe force and motion and the principles that explain them.
12.D.3a. Explain and demonstrate how forces affect motion (e.g., action/reaction, equilibrium conditions, free-falling objects).
Physical Science Lab, Level A: Cards 54, 55, 56, 57, 58, 59 Physical Science Lab, Level B: Cards 54, 55, 56, 57, 58, 59 Physical Science Lab Teacher's Handbook: Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
D. Know and apply concepts that describe force and motion and the principles that explain them.
12.D.3b. Explain the factors that affect the gravitational forces on objects (e.g., changes in mass, distance).
Physical Science Lab, Level A: Cards 57, 59
Physical Science Lab, Level B: Cards 57, 59

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
E. Know and apply concepts that describe the features and processes of the Earth and its resources.
12.E.3a. Analyze and explain large-scale dynamic forces, events, and processes that affect the Earth’s land, water and atmospheric systems (e.g., jetstream, hurricanes, plate tectonics).
Earth Science Lab, Level A: Cards 10, 11, 12, 13, 14, 15, 16, 17, 22, 24, 25, 26, 27, 28, 37, 38, 39, 40, 41, 42, 52, 53, 54, 56, 57, 58, 59, 60, 61, 86, 88
Earth Science Lab, Level B: Cards 10, 11, 12, 13, 14, 15, 16, 17, 22, 24, 25, 26, 27, 28, 37, 38, 39, 40, 41, 42, 52, 53, 54, 56, 57, 58, 59, 60, 61, 86, 88
Earth Science Lab Teacher’s Handbook: Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
E. Know and apply concepts that describe the features and processes of the Earth and its resources.
12.E.3b. Describe interactions between solid earth, oceans, atmosphere and organisms that have resulted in ongoing changes of Earth (e.g., erosion, El Niño).
Life Science Lab, Level A: Cards 86, 87, 88, 89, 90
Life Science Lab, Level B: Cards 86, 87, 88, 89, 90
Life Science Lab Teacher’s Handbook: Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
Earth Science Lab, Level A: Cards 15, 17, 22, 24, 25, 26, 27, 28, 37, 42, 52, 53, 54, 59, 60, 61, 86
Earth Science Lab, Level B: Cards 15, 17, 22, 24, 25, 26, 27, 28, 37, 42, 52, 53, 54, 59, 60, 61, 86
Earth Science Lab Teacher’s Handbook: Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
E. Know and apply concepts that describe the features and processes of the Earth and its resources.
12.E.3c. Evaluate the biodegradability of renewable and nonrenewable natural resources.
Life Science Lab, Level A: Cards 84, 87, 88, 89, 90
Life Science Lab, Level B: Cards 84, 87, 88, 89, 90
Life Science Lab Teacher’s Handbook: Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
Earth Science Lab, Level A: Cards 35, 37, 42, 59, 60, 61
Earth Science Lab, Level B: Cards 35, 37, 42, 59, 60, 61
Earth Science Lab Teacher’s Handbook: Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91
Physical Science Lab, Level A: Cards 34, 46, 47, 49
Physical Science Lab, Level B: Cards 34, 46, 47, 49

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
F. Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.
12.F.3a. Simulate, analyze and explain the effects of gravitational force in the solar system (e.g., orbital shape and speed, tides, spherical shape of the planets and moons).
Earth Science Lab, Level A: Cards 62, 66, 68, 69, 71, 90 Earth Science Lab, Level B: Cards 62, 66, 68, 69, 71, 90
Physical Science Lab, Level A: Cards 48, 57, 59 Physical Science Lab, Level B: Cards 48, 57, 59

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
F. Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.
12.F.3b. Describe the organization and physical characteristics of the solar system (e.g., sun, planets, satellites, asteroids, comets).
Earth Science Lab, Level A: Cards 62, 63, 67, 68, 69, 70, 71, 72, 73, 74 Earth Science Lab, Level B: Cards 62, 63, 67, 68, 69, 70, 71, 72, 73, 74 Earth Science Lab Teacher's Handbook: Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99

State Goal 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/science sciences.
F. Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.
12.F.3c. Compare and contrast the sun as a star with other objects in the Milky Way Galaxy (e.g., nebulae, dust clouds, stars, black holes).
Earth Science Lab, Level A: Cards 67, 75, 76 Earth Science Lab, Level B: Cards 67, 75, 76

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
A. Know and apply the accepted practices of science.
13.A.3a. Identify and reduce potential hazards in science activities (e.g., ventilation, handling chemicals).
Life Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
Earth Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i> , pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
Physical Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
A. Know and apply the accepted practices of science.
13.A.3b. Analyze historical and contemporary cases in which the work of science has been affected by both valid and biased scientific practices.
Life Science Lab, Level A: Cards 5, 46, 49, 64, 69, 83, 87, 88, 89, 90 Life Science Lab, Level B: Cards 5, 46, 49, 64, 69, 83, 87, 88, 89, 90
Earth Science Lab, Level A: Cards 10, 16, 20, 31, 37, 68, 70, 72, 78, 79, 80, 81 Earth Science Lab, Level B: Cards 10, 16, 20, 31, 37, 68, 70, 72, 78, 79, 80, 81
Physical Science Lab, Level A: Cards 3, 17, 33, 55, 81, 84, 90 Physical Science Lab, Level B: Cards 3, 17, 33, 55, 81, 84, 90

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
A. Know and apply the accepted practices of science.
13.A.3c. Explain what is similar and different about observational and experimental investigations.
Life Science Lab Teacher’s Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
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State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
B. Know and apply concepts that describe the interaction between science, technology and society.
13.B.3a. Explain and identify ways that scientific knowledge and economics drive technological development.
Earth Science Lab, Level A: Cards 20, 51, 79, 80, 81 Earth Science Lab, Level B: Cards 20, 51, 79, 80, 81
Physical Science Lab, Level A: Cards 35, 46, 47, 48, 49, 76, 81, 84, 90 Physical Science Lab, Level B: Cards 35, 46, 47, 48, 49, 76, 81, 84, 90

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
B. Know and apply concepts that describe the interaction between science, technology and society.
13.B.3b. Identify important contributions to science and technology that have been made by individuals and groups from various cultures.
Life Science Lab, Level A: Cards 2, 5, 46, 59 Life Science Lab, Level B: Cards 2, 5, 46, 59 Earth Science Lab, Level A: Cards 10, 68, 72, 78 Earth Science Lab, Level B: Cards 10, 68, 72, 78 Physical Science Lab, Level A: Cards 3, 7, 17, 55 Physical Science Lab, Level B: Cards 3, 7, 17, 55

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
B. Know and apply concepts that describe the interaction between science, technology and society.
13.B.3c. Describe how occupations use scientific and technological knowledge and skills.
Life Science Lab, Level A: Cards 46, 69 Life Science Lab, Level B: Cards 46, 69 Earth Science Lab, Level A: Cards 34, 51, 79 Earth Science Lab, Level B: Cards 34, 51, 79 Physical Science Lab, Level A: Cards 81, 84 Physical Science Lab, Level B: Cards 81, 84

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
B. Know and apply concepts that describe the interaction between science, technology and society.
13.B.3d. Analyze the interaction of resource acquisition, technological development and ecosystem impact (e.g., diamond, coal or gold mining; deforestation).
Life Science Lab, Level A: Cards 84, 85, 86, 87, 88, 89, 90 Life Science Lab, Level B: Cards 84, 85, 86, 87, 88, 89, 90 Life Science Lab Teacher’s Handbook: Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103 Earth Science Lab, Level A: Cards 37, 42, 59, 60, 61, 85, 86 Earth Science Lab, Level B: Cards 37, 42, 59, 60, 61, 85, 86 Earth Science Lab Teacher’s Handbook: Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.
B. Know and apply concepts that describe the interaction between science, technology and society.
13.B.3e. Identify advantages and disadvantages of natural resource conservation and management programs.
Life Science Lab, Level A: Cards 84, 85, 86, 87, 88, 89, 90 Life Science Lab, Level B: Cards 84, 85, 86, 87, 88, 89, 90 Life Science Lab Teacher’s Handbook: Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103 Earth Science Lab, Level A: Cards 35, 37, 42, 59, 60, 61, 85, 86, 90 Earth Science Lab, Level B: Cards 35, 37, 42, 59, 60, 61, 85, 86, 90 Earth Science Lab Teacher’s Handbook: Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91 Physical Science Lab, Level A: Cards 46, 47, 48, 49 Physical Science Lab, Level B: Cards 46, 47, 48, 49

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary contexts.

B. Know and apply concepts that describe the interaction between science, technology and society.

13.B.3f. Apply classroom-developed criteria to determine the effects of policies on local science and technology issues (e.g., energy consumption, landfills, water quality).

Life Science Lab, Level A: Cards 84, 85, 86, 87, 88, 89, 90

Life Science Lab, Level B: Cards 84, 85, 86, 87, 88, 89, 90

Life Science Lab Teacher's Handbook: Hands-On Activity 7, *The Effects of Acid Rain*, pages 101-103

Earth Science Lab, Level A: Cards 35, 37, 42, 59, 60, 61, 85, 86, 90

Earth Science Lab, Level B: Cards 35, 37, 42, 59, 60, 61, 85, 86, 90

Earth Science Lab Teacher's Handbook: Hands-On Activity 5, *What is in the Air?*, pages 89-91

Physical Science Lab, Level A: Cards 34, 46, 47, 48, 49

Physical Science Lab, Level B: Cards 34, 46, 47, 48, 49