

SRA Life, Earth, and Physical Science Laboratories
correlation to
Oregon Science Standards
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.

PHYSICAL SCIENCE
MATTER
Understand structures and properties of matter.
SC.08.PS.01 Compare properties of specific structures.
SC.08.PS.01.01 Describe how to measure characteristic properties including boiling and melting points, solubility, and density.
Physical Science Lab, Level A: Cards 1, 2, 5, 6, 14, 156, 16, 42
Physical Science Lab, Level B: Cards 1, 2, 5, 6, 14, 15, 16, 42
Physical Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79

PHYSICAL SCIENCE
MATTER
Understand structures and properties of matter.
SC.08.PS.01 Compare properties of specific structures.
SC.08.PS.01.02 Recognize that substances may be grouped by their physical properties.
Physical Science Lab, Level A: Cards 5, 14, 15, 17, 18, 19, 20
Physical Science Lab, Level B: Cards 5, 14, 15, 17, 18, 19, 20

PHYSICAL SCIENCE
MATTER
Understand structures and properties of matter.
SC.08.PS.01 Compare properties of specific structures.
SC.08.PS.01.03 Use the concept of density to evaluate which objects will float or sink in water.
Physical Science Lab, Level A: Card 61
Physical Science Lab, Level B: Card 61

PHYSICAL SCIENCE
MATTER
Understand chemical and physical changes.
SC.08.PS.02 Compare physical and chemical changes.
SC.08.PS.02.01 Distinguish between examples of chemical changes and physical changes.
Physical Science Lab, Level A: Cards 6, 7, 8, 9, 27, 28, 29, 30
Physical Science Lab, Level B: Cards 6, 7, 8, 9, 27, 28, 29, 30
Physical Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83

PHYSICAL SCIENCE
MATTER
Understand chemical and physical changes.
SC.08.PS.02 Compare physical and chemical changes.
SC.08.PS.02.02 Describe processes that will separate the components of physical mixtures.
Physical Science Lab, Level A: Cards 12, 13
Physical Science Lab, Level B: Cards 12, 13

PHYSICAL SCIENCE
MATTER
Understand chemical and physical changes.
SC.08.PS.02 Compare physical and chemical changes.
SC.08.PS.02.03 Describe events that accompany chemical changes, but not physical changes.
Physical Science Lab, Level A: Cards 9, 27, 28, 29, 30
Physical Science Lab, Level B: Cards 9, 27, 28, 29, 30
Physical Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83

PHYSICAL SCIENCE
MATTER
Understand chemical and physical changes.
SC.08.PS.02 Compare physical and chemical changes.
SC.08.PS.02.04 Explain how our understanding of the nature of matter and chemical reactions has changed over time.
Physical Science Lab, Level A: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30
Physical Science Lab, Level B: Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30
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

PHYSICAL SCIENCE
FORCE
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.03 Explain interactions between force and matter and relationships among force, mass, and motion.
SC.08.PS.03.01 Recognize and describe the motion of an object based on its mass and the force exerted on it.
Physical Science Lab, Level A: Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59
Physical Science Lab, Level B: Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59
Physical Science Lab Teacher's Handbook: Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91

PHYSICAL SCIENCE
FORCE
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.03 Explain interactions between force and matter and relationships among force, mass, and motion.
SC.08.PS.03.02 Predict the change in direction or speed of an object by changing the forces acting on it.
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
FORCE
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.03 Explain interactions between force and matter and relationships among force, mass, and motion.
SC.08.PS.03.03 Explain inertia.
Physical Science Lab, Level A: Card 53
Physical Science Lab, Level B: Card 53

PHYSICAL SCIENCE
FORCE
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.04 Recognize that every object exerts gravitational force on every other object.
SC.08.PS.04.01 Describe the effect of gravitational force on objects at the Earth’s surface.
Physical Science Lab, Level A: Cards 57, 59
Physical Science Lab, Level B: Cards 57, 59

PHYSICAL SCIENCE
ENERGY
Understand energy, its transformations, and interactions with matter.
SC.08.PS.05 Compare forms and behaviors of various types of energy.
SC.08.PS.05.01 Distinguish between the forms of energy including heat, chemical, mechanical, and gravitational potential energy.
Physical Science Lab, Level A: Cards 36, 37, 39, 40, 41, 42, 45, 46, 47, 48, 49, 66, 67, 70
Physical Science Lab, Level B: Cards 36, 37, 39, 40, 41, 42, 45, 46, 47, 48, 49, 66, 67, 70
Physical Science Lab Teacher’s Handbook: Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95

PHYSICAL SCIENCE
ENERGY
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.06 Describe and explain various energy transfers and resulting transformations.
SC.08.PS.06.01 Trace the flow of energy transformations in a system.
Physical Science Lab, Level A: Cards 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 66, 67, 70, 76
Physical Science Lab, Level B: Cards 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 66, 67, 70, 76
Physical Science Lab Teacher’s Handbook: Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95

PHYSICAL SCIENCE
ENERGY
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.06 Describe and explain various energy transfers and resulting transformations.
SC.08.PS.06.02 Explain the principle that energy is conserved, neither created nor destroyed.
Physical Science Lab, Level A: Card 37
Physical Science Lab, Level B: Card 37

PHYSICAL SCIENCE
ENERGY
Understand fundamental forces, their forms, and their effects on motion.
SC.08.PS.06 Describe and explain various energy transfers and resulting transformations.
SC.08.PS.06.03 Identify how technological advances have changed humankind’s use of energy.
Physical Science Lab, Level A: Cards 34, 36, 39, 40, 41, 46, 47, 48, 49, 68, 69, 70, 71, 72, 73, 76, 81, 84
Physical Science Lab, Level B: Cards 34, 36, 39, 40, 41, 46, 47, 48, 49, 68, 69, 70, 71, 72, 73, 76, 81, 84

LIFE SCIENCE
ORGANISMS
Understand the characteristics, structures, and functions of organisms.
SC.08.LS.01 Describe and explain the relationship and interaction of organ systems.
SC.08.LS.01.01 Identify organ systems at work during a particular activity and describe their effect on each other.
Life Science Lab, Level A: Cards 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58
Life Science Lab, Level B: Cards 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58
Life Science Lab Teacher's Handbook: Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91

LIFE SCIENCE
ORGANISMS
Understand the characteristics, structures, and functions of organisms.
SC.08.LS.02 Describe and explain the structure and functions of an organism in terms of cells, tissues, and organs.
SC.08.LS.02.01 Identify differences and similarities between plant and animal cells.
Life Science Lab, Level A: Cards 6, 7
Life Science Lab, Level B: Cards 6, 7
Life Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79

LIFE SCIENCE
ORGANISMS
Understand the characteristics, structures, and functions of organisms.
SC.08.LS.02 Describe and explain the structure and functions of an organism in terms of cells, tissues, and organs.
SC.08.LS.02.02 Recognize how structural differences among organisms at the cellular, tissue, and organ level are related to their habitat and life requirements.
Life Science Lab, Level A: Cards 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58
Life Science Lab, Level B: Cards 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58
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

LIFE SCIENCE
ORGANISMS
Understand the characteristics, structures, and functions of organisms.
SC.08.LS.02 Describe and explain the structure and functions of an organism in terms of cells, tissues, and organs.
SC.08.LS.02.03 Identify photosynthesis as the process by which plants use the energy from light to make sugars out of carbon dioxide and water, and that this food can be used immediately for fuel or materials or it may be stored for later use.
Life Science Lab, Level A: Cards 7, 9, 16, 17, 76
Life Science Lab, Level B: Cards 7, 9, 16, 17, 76

LIFE SCIENCE
ORGANISMS
Understand the characteristics, structures, and functions of organisms.
SC.08.LS.02 Describe and explain the structure and functions of an organism in terms of cells, tissues, and organs.
SC.08.LS.02.04 Explain how our understanding of cells and microbes has changed over time.
Life Science Lab, Level A: Cards 5, 6, 7, 8, 9, 10
Life Science Lab, Level B: Cards 5, 6, 7, 8, 9, 10
Life Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79

LIFE SCIENCE
HEREDITY
Understand the transmission of traits in living things.
SC.08.LS.03 Describe how traits of an organism are passed from generation to generation.
SC.08.LS.03.01 Distinguish between asexual and sexual reproduction.
Life Science Lab, Level A: Cards 58, 60, 61
Life Science Lab, Level B: Cards 58, 60, 61

LIFE SCIENCE
HEREDITY
Understand the transmission of traits in living things.
SC.08.LS.03 Describe how traits of an organism are passed from generation to generation.
SC.08.LS.03.02 Identify traits inherited through genes and those resulting from interactions with the environment.
Life Science Lab, Level A: Cards 23, 24, 41, 43, 62, 63, 64, 65
Life Science Lab, Level B: Cards 23, 24, 41, 43, 62, 63, 64, 65

LIFE SCIENCE
HEREDITY
Understand the transmission of traits in living things.
SC.08.LS.03 Describe how traits of an organism are passed from generation to generation.
SC.08.LS.03.03 Use simple laws of probability to predict patterns of heredity with the use of Punnett squares.
Life Science Lab, Level A: Cards 62, 63
Life Science Lab, Level B: Cards 62, 63

LIFE SCIENCE
HEREDITY
Understand the transmission of traits in living things.
SC.08.LS.03 Describe how traits of an organism are passed from generation to generation.
SC.08.LS.03.04 Explain how our understanding of heredity has changed over time.
Life Science Lab, Level A: Cards 62, 63, 64, 65, 66, 67, 69
Life Science Lab, Level B: Cards 62, 63, 64, 65, 66, 67, 69

LIFE SCIENCE
DIVERSITY/INTERDEPENDENCE
Understand the relationships among living things and between living things and their environments.
SC.08.LS.04 Identify and describe the factors that influence or change the balance of populations in their environment.
SC.08.LS.04.01 Identify that sunlight is the major source of energy in most ecosystems and that energy then passes from organism to organism in food webs.
Life Science Lab, Level A: Cards 7, 9, 13, 16, 17, 76, 77
Life Science Lab, Level B: Cards 7, 9, 13, 16, 17, 76, 77
Life Science Lab Teacher’s Handbook: Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99

LIFE SCIENCE
DIVERSITY/INTERDEPENDENCE
Understand the relationships among living things and between living things and their environments.
SC.08.LS.04 Identify and describe the factors that influence or change the balance of populations in their environment.
SC.08.LS.04.02 Identify populations of organisms within an ecosystem by the function that they serve.
Life Science Lab, Level A: Cards 71, 72, 73, 74, 75, 76, 77
Life Science Lab, Level B: Cards 71, 72, 73, 74, 75, 76, 77
Life Science Lab Teacher’s Handbook: Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99

LIFE SCIENCE
DIVERSITY/INTERDEPENDENCE
Understand the relationships among living things and between living things and their environments.
SC.08.LS.04 Identify and describe the factors that influence or change the balance of populations in their environment.
SC.08.LS.04.03 Differentiate between relationships among organisms including predator-prey, producer-consumer, and parasite-host.
Life Science Lab, Level A: Cards 73, 74, 76, 77
Life Science Lab, Level B: Cards 73, 74, 76, 77

LIFE SCIENCE
DIVERSITY/INTERDEPENDENCE
Understand the relationships among living things and between living things and their environments.
SC.08.LS.04 Identify and describe the factors that influence or change the balance of populations in their environment.
SC.08.LS.04.04 Explain the importance of niche to an organism’s ability to avoid direct competition for resources.
Life Science Lab, Level A: Card 75
Life Science Lab, Level B: Card 75

LIFE SCIENCE
DIVERSITY/INTERDEPENDENCE
Understand the relationships among living things and between living things and their environments.
SC.08.LS.05 Describe and explain the theory of natural selection as a mechanism for evolution.
SC.08.LS.05.01 Identify and explain how random variations in species can be preserved through natural selection.
Life Science Lab, Level A: Cards 65, 66, 67
Life Science Lab, Level B: Cards 65, 66, 67

LIFE SCIENCE
DIVERSITY/INTERDEPENDENCE
Understand the relationships among living things and between living things and their environments.
SC.08.LS.05 Describe and explain the theory of natural selection as a mechanism for evolution.
SC.08.LS.05.02 Describe how animal and plant structures adapt to environmental change.
Life Science Lab, Level A: Cards 23, 41, 64, 65, 66, 67
Life Science Lab, Level B: Cards 23, 41, 64, 65, 66, 67

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand the properties and limited availability of the materials which make up the Earth.
SC.08.ES.01 Recognize that Earth materials are limited, and explore strategies for addressing this problem.
SC.08.ES.01.01 Identify ways in which various resources can be recycled and reused.
Earth Science Lab, Level A: Cards 87, 88
Earth Science Lab, Level B: Cards 87, 88

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.02 Explain the water cycle and its relationship to weather and climatic patterns.
SC.08.ES.02.01 Explain the water cycle.
Earth Science Lab, Level A: Cards 47, 48, 49
Earth Science Lab, Level B: Cards 47, 48, 49

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.02 Explain the water cycle and its relationship to weather and climatic patterns.
SC.08.ES.02.02 Identify factors that cause or affect weather patterns.
Earth Science Lab, Level A: Cards 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61
Earth Science Lab, Level B: Cards 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61
Earth Science Lab Teacher’s Handbook: 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

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.02 Explain the water cycle and its relationship to weather and climatic patterns.
SC.08.ES.02.03 Identify factors that affect the rate of evaporation, condensation, and cloud formation.
Earth Science Lab, Level A: Cards 44, 45, 46, 47, 48, 49, 52, 53, 54, 56, 57
Earth Science Lab, Level B: Cards 44, 45, 46, 47, 48, 49, 52, 53, 54, 56, 57

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.02 Explain the water cycle and its relationship to weather and climatic patterns.
SC.08.ES.02.04 Identify the difference between weather and climate.
Earth Science Lab, Level A: Cards 43, 55, 56, 57, 58, 60
Earth Science Lab, Level B: Cards 43, 55, 56, 57, 58, 60

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.02 Explain the water cycle and its relationship to weather and climatic patterns.
SC.08.ES.02.05 Explain how geography affects climate.
Earth Science Lab, Level A: Cards 56, 57, 58, 60
Earth Science Lab, Level B: Cards 56, 57, 58, 60

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth’s structure and how it changes over time.
SC.08.ES.03.01 Recognize the solid Earth is layered with a lithosphere, a hot convecting mantle, and a dense metallic core.
Earth Science Lab, Level A: Cards 1, 2
Earth Science Lab, Level B: Cards 1, 2

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth's structure and how it changes over time.
SC.08.ES.03.02 Identify the processes that result in different kinds of landforms.
Earth Science Lab, Level A: Cards 2, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 24, 25, 26, 27, 28, 88
Earth Science Lab, Level B: Cards 2, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 24, 25, 26, 27, 28, 88
Earth Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth's structure and how it changes over time.
SC.08.ES.03.03 Identify factors affecting water flow, soil erosion, and deposition.
Earth Science Lab, Level A: Cards 23, 24, 25, 26, 27, 28, 29
Earth Science Lab, Level B: Cards 23, 24, 25, 26, 27, 28, 29

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth's structure and how it changes over time.
SC.08.ES.03.04 Given examples of landform changes that occur at different rates.
Earth Science Lab, Level A: Cards 9, 10, 11, 12, 13, 14, 15, 16, 17, 22, 24, 25, 26, 27, 28, 88
Earth Science Lab, Level B: Cards 9, 10, 11, 12, 13, 14, 15, 16, 17, 22, 24, 25, 26, 27, 28, 88
Earth Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth's structure and how it changes over time.
SC.08.ES.03.05 Describe the evidence for and the development of the theory of plate tectonics.
Earth Science Lab, Level A: Cards 2, 10, 11, 12, 13, 14, 15, 16, 17, 88
Earth Science Lab, Level B: Cards 2, 10, 11, 12, 13, 14, 15, 16, 17, 88
Earth Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth's structure and how it changes over time.
SC.08.ES.03.06 Explain the rock cycle in terms of constructive (crustal deformation, volcanic eruption, and sediment deposition) and destructive (weathering and erosion) forces in land formation.
Earth Science Lab, Level A: Cards 6, 7, 8, 9, 17, 22, 24, 25, 26, 27, 28, 29, 88
Earth Science Lab, Level B: Cards 6, 7, 8, 9, 17, 22, 24, 25, 26, 27, 28, 29, 88

EARTH and SPACE SCIENCE
THE DYNAMIC EARTH
Understand changes occurring within the lithosphere, hydrosphere, and atmosphere of the Earth.
SC.08.ES.03 Describe the Earth's structure and how it changes over time.
SC.08.ES.03.07 Describe that the total amount of Earth material stays the same as its forms change in the rock cycle.
Earth Science Lab, Level A: Cards 6, 7, 8, 9
Earth Science Lab, Level B: Cards 6, 7, 8, 9

EARTH and SPACE SCIENCE
The Earth in Space
Understand the Earth's place in the solar system and the universe.
SC.08.ES.04 Explain the relationship of the Earth's motion to the day, season, year, phases of the moon, and eclipses.
SC.08.ES.04.01 Explain the relations between the cycle of seasons and the tilt of the Earth on its axis.
Earth Science Lab, Level A: Cards 55, 62
Earth Science Lab, Level B: Cards 55, 62

SCIENTIFIC INQUIRY
FORMULATING THE QUESTION/HYPOTHESIS
Formulate and express scientific questions or hypotheses to be investigated.
SC.08.SI.01 Based on observations and scientific concepts, ask questions or form hypotheses that can be explored through scientific 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
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
Classroom Resource CD-ROM: Writing Strategy 8, 15

SCIENTIFIC INQUIRY
DESIGNING THE INVESTIGATION
Design safe and ethical scientific investigations to address questions or hypotheses.
SC.08.SI.02 Design a scientific investigation to address questions or hypotheses.
<p>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</p> <p>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</p> <p>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</p> <p>Classroom Resource CD-ROM: Writing Strategy 8, 15</p>

SCIENTIFIC INQUIRY
COLLECTING AND PRESENTING DATA
Conduct procedures to collect, organize, and display scientific data.
SC.08.SI.03 Collect, organize, and display sufficient data to support analysis.
<p>Life Science Lab Teacher’s Handbook: 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</p> <p>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 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p>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</p> <p>Classroom Resource CD-ROM: Writing Strategy 22, 24</p>

SCIENTIFIC INQUIRY
ANALYZING DATA AND INTERPRETING RESULTS
Analyze scientific information to develop and present conclusions.
SC.08.SI.04 Summarize and analyze data including possible sources of error. Explain results and offer reasonable and accurate interpretations and implications.
<p>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</p> <p>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</p> <p>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</p>