SRA Snapshots Video Science™: Level A correlation to Nevada Science Standards Grade 3

SRA Snapshots Video Science TM consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	Program Component
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.1. Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.2. Students know how to compare the results of their experiments to what scientists already know about the world. I/L

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.3. Students know how to draw conclusions from scientific evidence. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 2, Process Skill, SE page 59; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.4. Students know graphic representations of recorded data can be used to make predictions. E/S

Chapter 1, Lesson 2, Math in Science, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 87

Chapter 5, Lesson 2, Math in Science, SE page 103; Process Skill, SE page 103; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.5. Students know how to plan and conduct a safe and simple investigation. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.6. Students know models are tools for learning about the things they are meant to resemble. I/S

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 3, Process Skill, SE page 153

Chapter 9, Lesson 2, Process Skill, SE page 191

Food Web, SE page 203

Earth's Layers, SE page 204

The Water Cycle, SE page 204

Climate Zones, SE page 205

Eclipses, SE page 205

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.7. Students know observable patterns can be used to organize items and ideas. E/S

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19

Chapter 2, Lesson 2, Video C, SE page 33

Chapter 5, Lesson 2, Video B, SE page 100

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video SE page 115; LabTime Hands-On Activity 6,

TRB pages 105-107, TG page 120

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.1. Students know that, throughout history, people of diverse cultures have provided scientific knowledge and technologies. E/S

Chapter 3, Lesson 2 Process Skill, SE page 59

Chapter 4, KnowZone, SE pages 80-81

Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105

Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129

Chapter 7, Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151

Chapter 8, KnowZone, SE pages 168-169

Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page SE page 188; Video C, SE page 189

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.2. Students know technologies impact society both positively and negatively. E/S

Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Math in Science, SE page 59

Chapter 5, KnowZone SE pages 96-97; Lesson 3, Video A, SE page 105

Chapter 6, KnowZone, SE pages 124-125; Lesson 3, Video BC, SE page 128; Video C, 129

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.3. Students know the benefits of working with a team and sharing findings. E/L

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.1. Students know the Sun is the main source of energy for planet Earth. E/S

Chapter 6, Lesson 2, Video A, SE page 119

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.2. Students know the processes of the water cycle, including the role of the Sun. E/S

Chapter 5, Lesson 2, Video B, SE page 100

The Planet Earth, SE page 204

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.3. Students know most of Earth's surface is covered with fresh or salt water. W/L

Chapter 5, Lesson 2, Video A, SE page 99

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.4. Students know the role of water in many phenomena related to weather (e.g., thunderstorms, snowstorms, flooding, drought). E/S

Chapter 5, Lesson 2, Video B, SE page 100; Process Skill, SE page 103; Lesson 3, Video A, SE page 105

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.5. Students know air is a substance that surrounds us, take up space, and moves around us as wind. I/S

Chapter 4, Lesson 3, Video A, SE page 83

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.1. Students know that there are more stars than anyone can easily count, but that are not scattered evenly, and they are not all the same brightness or color. W/L

Chapter 6, Lesson 3, Video A, SE page 127

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.2. Students know the solar system includes the Sun, planets, and moons. E/S

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Writing in Science, SE page 123

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.3. Students know stars are like the Sun, but they are so far away that they look like points of light. W/L

Chapter 6, Lesson 3, Video A, SE page 127

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.4. Students know they are cyclical patterns of observable objects in the solar system. I/S

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Process Skill, SE page 117; Lesson 3, Video A, SE page 127; Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.5. Students know the patterns of stars in the sky stay the same (e.g., the constellations), although they appear to move across the sky nightly, and different stars can be seen in different seasons. (14.5.2) W/S

Chapter 6, Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.1. Students know fossils are evidence of past life. E/S

Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.2. Students know water, wind, and ice constantly change the Earth's land surface by eroding rock and soil in some places and depositing them in other areas. E/S

Chapter 4, Lesson 1, Video B, SE page 70; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.3. Students know landforms may result from slow processes (e.g., erosion and deposition) and fast processes (e.g., volcanoes, earthquakes, landslides, flood, and human activity). E/S

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.4. Students know rock is composed of different combinations of minerals. E/S

Chapter 4, Lesson 2, Video A, SE page 75; Video C, SE page 77

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.5. Students know soil varies from place to place and bas both biological and mineral components. E/S

Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.1. Students know matter exists in different states (i.e., solid, liquid, gas) which have distinct physical properties. E/S

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skills 161

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.2. Students know heating and cooling can change some common materials, such as water, from one state to another. E/S

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skills 161

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.3. Students know materials can be classified by their observable physical and chemical properties (e.g., magnetism, conductivity, density, and solubility). E/S

Chapter 8, Lesson 1, Video B, SE page 158; Video C, SE page 159; Lesson 2, Process Skill, SE page167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.4. Students know that, by combining two or more materials, the properties of that material can be different from the original materials. E/S

Chapter 8, Lesson 2, Video C, SE page 165

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.5. Students know the mass of a material remains constant whether it is together, in parts, or in a different state. E/S

Chapter 8, Lesson 1, Video A, SE page 157; Video C, SE page 159

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.6. Students know materials are composed of parts that are too small to be seen without magnification. E/S

Chapter 8, Lesson 1, Video B, SE page 158; Process Skill, SE page 161

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.1. Students know that, when an unbalanced force is applied to an object, the object either speeds up, slows down, or goes in a different direction. E/S

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.2. Students know how the strength of a force and mass of an object influence the amount of change in an object's motion. E/S

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.3. Students know a magnetic force causes certain kinds of objects to attract and repel each other. E/S

Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147; Process Skill, SE page 147

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.4. Students know electrically charged particles can attract or repel other electrically charged material (e.g., static electricity). E/S

Chapter 7, Lesson 2, Video C, SE page 145

Chapter 9, KnowZone, SE pages 184-185

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.5. Students know Earth's gravity pulls any object toward it without touching it. E/S

Chapter 7, Lesson 1, Video C, SE page 137

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.1. Students know light can be described in terms of simple properties (e.g., color, brightness, reflection). I/S

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.2. Students know the wave characteristics of sound. E/S

Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183; Writing in Science, SE page 183; Process Skill, SE page 183

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.3. Students know heat is often produced as a byproduct when one form of energy is converted to another form (e.g., when machines and living organisms convert stored energy to motion). E/S

Chapter 8, Lesson 2, Video C, SE page 165; Lesson 3, Video A, SE page 171

Chapter 9, Lesson 3, Video B, SE page 194

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.4. Students know heat can move from one object to another by conduction, and some materials conduct heat better than others. E/S

Chapter 8, Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.5. Students know the organization of a simple electrical circuit (i.e., battery or generator, wire, a complete loop through which the electrical current can pass). I/L

Chapter 9, Lesson 2, Video B, SE page 188; Video C, SE page 189; Process Skill, SE page 191

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.1. Students know some physical characteristics and behaviors are inherited in animals and plants. E/S

Chapter 2, Lesson 3, Video B, SE page 40; Video C, SE page 41

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.2. Students know reproduction is an essential characteristic for the continuation of every species. E/S

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.3. Students know that, while offspring resemble their parents and each other, they also exhibit differences in characteristics. E/S

Chapter 1, Lesson 3, SE page 19

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.4. Students know how to observe and describe variations among individuals within the human population. E/S

Chapter 1, Lesson 3, SE page 19

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A. 5. Students know some animal behaviors are learned. E/S

Chapter 2, Lesson 3, Video B, SE page 40; Video C, SE page 41

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells, Cells range from very simple to complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B. Students understand that living things have specialized structures that perform a variety of life functions.

L.5.B.1. Students know plants and animals have structures that enable them to grow, reproduce, and survive. E/S

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video C, SE page 19 Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells, Cells range from very simple to complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B. Students understand that living things have specialized structures that perform a variety of life functions.

L.5.B.2. Students know living things have predictable life cycles. E/S

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.1. Students know the organization of simple food webs. E/S

Chapter 2, Lesson 2, Video A, 31; Video B, SE page 32; Video C, SE page 33; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Energy Transfer, SE page 203

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.2. Students know organisms interact with each other and with the non-living parts of their ecosystem. E/S

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C< SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 2; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.3. Students know changes to an environment can be beneficial or detrimental to different organisms. E/S

Chapter 2, Lesson 1, Video C, SE page 27

Chapter 3, Lesson 1, Video A, SE page 47; Video C, SE page 49; Lesson 3, Video A, SE page 61; Video C, SE page 63; Critical Thinking, SE page 65

Chapter 4, Lesson 3, Video B, SE page 84; Video C, SE page 85

Chapter 5, Lesson 2, Video C, SE page 101

Chapter 9, Lesson 3, Video C, SE page 195

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.4. Students know all organisms, including humans, can cause changes in their environments. E/S

Chapter 2, Lesson 1, Video C, SE page 27

Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.5. Students know plants and animals have adaptations allowing them to survive in specific ecosystems. E/S

Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.1. Students know animals and plants can be classified according to their observable characteristics. E/S

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11 Classification, SE page 202

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.2. Students know fossils are evidence of past life. E/S

Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.3. Students know differences among individuals within a species give them advantages and/or disadvantages in surviving and reproducing. E/S

Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41

SRA Snapshots Video Science™: Level B correlation to Nevada Science Standards Grade 4

SRA Snapshots Video Science TM consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	Program Component
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.1. Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.2. Students know how to compare the results of their experiments to what scientists already know about the world. I/L

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.3. Students know how to draw conclusions from scientific evidence. E/S

Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.4. Students know graphic representations of recorded data can be used to make predictions. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 1, Math in Science, SE page 117; Lesson 3, Math in Science, SE page 129; LabTime Hands-On

Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 189; Lesson 3, Math in Science, SE page 195; LabTime Hands-On Activity

9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.5. Students know how to plan and conduct a safe and simple investigation. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.6. Students know models are tools for learning about the things they are meant to resemble. I/S

Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 6, Lesson 1, Process Skill, SE page 117

Chapter 8, Lesson 3, Process Skill, SE page 175

Chapter 9, Lesson 2, Process Skill, SE page 189

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.7. Students know observable patterns can be used to organize items and ideas. E/S

Chapter 1, Lesson 3, Video C, SE page 13

Chapter 3, Lesson 2, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41

Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115

The Water Cycle, SE page 204

Earth in Space, SE page 205

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.1. Students know that, throughout history, people of diverse cultures have provided scientific knowledge and technologies. E/S

Chapter 4, Lesson 2, Video C, SE page 77

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Math in Science, SE page

129; KnowZone, SE pages 130-131

Chapter 7, Lesson 3, Video A, SE page 149

Chapter 8 KnowZone, SE pages 168-169

Chapter 9 KnowZone, SE pages 196-197

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.2. Students know technologies impact society both positively and negatively. E/S

Chapter 4, Lesson 1, Video B, SE page 70; Lesson 3, Video C, SE page 83

Chapter 5, Lesson 2, Video C, SE page 99; KnowZone, SE pages 102-103

Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Process Skill, SE page 129

Chapter 7, KnowZone, SE pages 140-141

Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169

Chapter 9, Lesson 2, Video C, SE page 187; Process Skill, SE page 189; Lesson 3, Video A, SE page 191; Process Skill,

SE page 195; KnowZone, SE pages 196-197

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.3. Students know the benefits of working with a team and sharing findings. E/L

Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, Lesson 1, Process Skill, SE page 29; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.1. Students know the Sun is the main source of energy for planet Earth. E/S

Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 5, Lesson 1, Video A, SE page 91; KnowZone, SE pages 102-103

Chapter 6, Lesson 1, Video A, SE page 113

Chapter 8, Lesson 2, Video A, SE page 163

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.2. Students know the processes of the water cycle, including the role of the Sun. E/S

Chapter 5, Lesson 1, Video A, SE page 91

The Water Cycle, SE page 204

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.3. Students know most of Earth's surface is covered with fresh or salt water. W/L

Chapter 3, Lesson 2, Video A, SE page 55

Chapter 4, Lesson 1, Video A, SE page 69

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.4. Students know the role of water in many phenomena related to weather (e.g., thunderstorms, snowstorms, flooding, drought). E/S

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

The Planet Earth, SE page 204

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.5. Students know air is a substance that surrounds us, take up space, and moves around us as wind. I/S

Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.1. Students know that there are more stars than anyone can easily count, but that are not scattered evenly, and they are not all the same brightness or color. W/L

Chapter 6, Lesson 1, Video B, SE page 114; Process Skill, SE page 117

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.2. Students know the solar system includes the Sun, planets, and moons. E/S

Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.3. Students know stars are like the Sun, but they are so far away that they look like points of light. W/L

Chapter 6, Lesson 1, Video B, SE page 114; Process Skill, SE page 117

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.4. Students know they are cyclical patterns of observable objects in the solar system. I/S

Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115; Process Skill, SE page 117

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.5. Students know the patterns of stars in the sky stay the same (e.g., the constellations), although they appear to move across the sky nightly, and different stars can be seen in different seasons. (14.5.2) W/S

See Level A:

Chapter 6, Lesson 3, Video A, SE page 127

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.1. Students know fossils are evidence of past life. E/S

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7

Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.2. Students know water, wind, and ice constantly change the Earth's land surface by eroding rock and soil in some places and depositing them in other areas. E/S

Chapter 4, Lesson 2, Video A, SE page 75

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.3. Students know landforms may result from slow processes (e.g., erosion and deposition) and fast processes (e.g., volcanoes, earthquakes, landslides, flood, and human activity). E/S

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.4. Students know rock is composed of different combinations of minerals. E/S

Chapter 4, Lesson 2, Video B, SE page 76; Video C, SE page 77; Process Skills, SE page 79; Lesson 3, Video A, SE page 81

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.5. Students know soil varies from place to place and bas both biological and mineral components. E/S

See Level A:

Chapter 4, Lesson 2, Video C, SE page 77; Process Skill, SE page 79

See also Level C:

Chapter 4, Lesson 3, Video C, SE page 85

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.1. Students know matter exists in different states (i.e., solid, liquid, gas) which have distinct physical properties. E/S

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 3, Video C, SE page 151

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.2. Students know heating and cooling can change some common materials, such as water, from one state to another. E/S

Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 3, Video C, SE page 151

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.3. Students know materials can be classified by their observable physical and chemical properties (e.g., magnetism, conductivity, density, and solubility). E/S

Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Process Skill, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.4. Students know that, by combining two or more materials, the properties of that material can be different from the original materials. E/S

Chapter 7, Lesson 3, Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.5. Students know the mass of a material remains constant whether it is together, in parts, or in a different state. E/S

Chapter 7, Lesson 1, Video C, SE page 137; Process Skill, SE page 139

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.6. Students know materials are composed of parts that are too small to be seen without magnification. E/S

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 3, Video B, SE page 150

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.1. Students know that, when an unbalanced force is applied to an object, the object either speeds up, slows down, or goes in a different direction. E/S

See Level A:

Chapter 7, Lesson 1, Video A, SE page 135

See also Level C:

Chapter 9, Lesson 2, Video A, SE page 187

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.2. Students know how the strength of a force and mass of an object influence the amount of change in an object's motion. E/S

See Level A:

Chapter 7, Lesson 1, Video A, SE page 135

See also Level C:

Chapter 9, Lesson 2, Video A, SE page 187

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.3. Students know a magnetic force causes certain kinds of objects to attract and repel each other. E/S

Chapter 9, Lesson 2, Video A, SE page 185

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.4. Students know electrically charged particles can attract or repel other electrically charged material (e.g., static electricity). E/S

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Critical Thinking, SE page 183; Process Skill, SE page 183

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.5. Students know Earth's gravity pulls any object toward it without touching it. E/S

Chapter 8, Lesson 3, Video A, SE page 171

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.1. Students know light can be described in terms of simple properties (e.g., color, brightness, reflection). I/S

Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.2. Students know the wave characteristics of sound. E/S

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Writing in Science, SE page 161; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB Pages 141-143; TG Page 156

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.3. Students know heat is often produced as a byproduct when one form of energy is converted to another form (e.g., when machines and living organisms convert stored energy to motion). E/S

Chapter 6, Lesson 1, Video A, SE page 113

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.4. Students know heat can move from one object to another by conduction, and come materials conduct heat better than others. E/S

See Level C:

Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Critical Thinking, SE page 167; Process Skill, SE page 167

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.5. Students know the organization of a simple electrical circuit (i.e., battery or generator, wire, a complete loop through which the electrical current can pass). I/L

Chapter 9, Lesson 1, Video C, SE page 181

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.1. Students know some physical characteristics and behaviors are inherited in animals and plants. E/S

Chapter 1, Lesson 2, Video C, SE page 11; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.2. Students know reproduction is an essential characteristic for the continuation of every species. E/S

Chapter 1, Lesson 2, Video C, SE page 11; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.3. Students know that, while offspring resemble their parents and each other, they also exhibit differences in characteristics. E/S

Chapter 1, Lesson 2, Video B, SE page 10

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.4. Students know how to observe and describe variations among individuals within the human population. E/S

Chapter 1, Lesson 2, Video B, SE page 10

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A. 5. Students know some animal behaviors are learned. E/S

Chapter 1, Lesson 2, Video C, SE page 11; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells, Cells range from very simple to complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B. Students understand that living things have specialized structures that perform a variety of life functions.

L.5.B.1. Students know plants and animals have structures that enable them to grow, reproduce, and survive. E/S

Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; KnowZone, SE pages 14-15; Lesson 3, Video B, SE page 18; Video C, SE page 19

Chapter 2, KnowZone, SE pages 36-37

Chapter 3, Lesson 1, Video B, SE page 48; KnowZone, SE pages 52-53; Lesson 2, Video B, SE page 56

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells, Cells range from very simple to complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B. Students understand that living things have specialized structures that perform a variety of life functions.

L.5.B.2. Students know living things have predictable life cycles. E/S

Level B:

Chapter 1, Lesson 3, Video C, SE page 19

See also Level A:

Chapter 1, Lesson 3, Video B, SE page 18; Process Skill, SE page 21

See also Level C:

Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.1. Students know the organization of simple food webs. E/S

Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.2. Students know organisms interact with each other and with the non-living parts of their ecosystem. E/S

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; Lesson

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Process Skill, SE page 51

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.3. Students know changes to an environment can be beneficial or detrimental to different organisms. E/S

Chapter 2, Lesson 1, Video B, SE page 26; Critical Thinking, SE page 29; Lesson 3, Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43

Chapter 3, Lesson 2, Video C, SE page 57; Critical Thinking, SE page 59; Lesson 3, Video C, SE page 62; Video C, SE page 63; Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.4. Students know all organisms, including humans, can cause changes in their environments. E/S

Chapter 2, Lesson 1, Video B, SE page 26; Lesson 3, Video C, SE page 41

Chapter 3, Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.5. Students know plants and animals have adaptations allowing them to survive in specific ecosystems. E/S

Chapter 1, Lesson 2, Video C, SE page 11; KnowZone, SE pages 14-15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, KnowZone, SE pages 36-37

Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video B, SE page 56

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.1. Students know animals and plants can be classified according to their observable characteristics. E/S

Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 9; Video B, SE page 10; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21

Classification, SE page 202

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.2. Students know fossils are evidence of past life. E/S

Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7

Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.3. Students know differences among individuals within a species give them advantages and/or disadvantages in surviving and reproducing. E/S

Chapter 1, Lesson 2, Video C, SE page 11

SRA Snapshots Video Science™: Level C correlation to Nevada Science Standards Grade 5

SRA Snapshots Video Science TM consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	Program Component
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.1. Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.2. Students know how to compare the results of their experiments to what scientists already know about the world. I/L

Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.3. Students know how to draw conclusions from scientific evidence. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.4. Students know graphic representations of recorded data can be used to make predictions. E/S

Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.5. Students know how to plan and conduct a safe and simple investigation. E/S

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Scientific Inquiry (Nature of Science Unifying Concept A)

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.6. Students know models are tools for learning about the things they are meant to resemble. I/S

Chapter 1, Lesson 1, Process Skill, SE page 7

Chapter 4, Lesson 3, Process Skill, SE page 87

Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 9, Lesson1, Process Skill, SE page 183

Scientific inquiry is the process by which human systematically examine the natural world. Scientific inquiry is a human endeavor and involves observation, reasoning, insight, energy, skill, and creativity. Scientific inquiry is used to formulate and text explanations of nature through observation, experiments, and theoretical or mathematical models. Scientific explanations and evidence are constantly reviewed and examined by others. Questioning, response to criticism and open communication are integral to the process of science.

N.5.A. Students understand that science involves asking questions and comparing the answers to what scientists know about the world.

N.5.A.7. Students know observable patterns can be used to organize items and ideas. E/S

Chapter 2, Lesson 2, Video A, SE page 31

Chapter 3, Lesson 1, Video C, SE page 49; Writing in Science, SE page 51

Chapter 4, Lesson 3, Video A, SE page 83

Chapter 5, Lesson 2, Video B, SE page 98; Process Skill, SE page 101

Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123

Food Web, SE page 203

The Water Cycle, SE page 204

Earth in Space, SE page 205

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.1. Students know that, throughout history, people of diverse cultures have provided scientific knowledge and technologies. E/S

Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16

Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129

Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169

Chapter 9, Lesson 2 Process Skill, SE page 191

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.2. Students know technologies impact society both positively and negatively. E/S

Chapter 1, Lesson 3, Critical Thinking, SE page 19

Chapter 2, Lesson 2, Critical Thinking, SE page 57

Chapter 3, Lesson 3, Video C, SE page 62; Video C, SE page 63

Chapter 4, Lesson 3, Vide C, SE page 85; Critical Thinking, SE page 87

Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101

Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131

Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173

Science, Technology, and Society (Nature of Science Unifying Concept B)

Technology defines a society or era. It can shape the environment in which people live, and it has increasingly become a larger part of people's lives. While many of technology's effects on society are regarded as desirable, other effects are seen as less desirable. These concepts are shared across subject areas such as science, math, technology, social studies and language arts. The development and use of technology affects society and the environment in which we live, and, at the same time, society affects the development of technology and its impact on culture.

N.5.B. Students understand that many people from all cultures and levels of ability, contribute to the fields of science and technology.

N.5.B.3. Students know the benefits of working with a team and sharing findings. E/L

Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84

Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.1. Students know the Sun is the main source of energy for planet Earth. E/S

Chapter 3, Lesson 1, Video C, SE page 49

Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video B, SE page 98; Lesson 3, Video C, SE page 105

Chapter 6, Lesson 1, Video A, SE page 113; Lesson 2, Video A, SE page 121

Chapter 8, Lesson 1, Video A, SE page 157

The Water Cycle, SE page 204

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.2. Students know the processes of the water cycle, including the role of the Sun. E/S

Chapter 4, Lesson 1, Video A, SE page 69

Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101

The Water Cycle, SE page 204

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.3. Students know most of Earth's surface is covered with fresh or salt water. W/L

Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.4. Students know the role of water in many phenomena related to weather (e.g., thunderstorms, snowstorms, flooding, drought). E/S

Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video A, SE page 97; Video B, SE page 98; Process Skill, SE page 101; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; KnowZone, SE pages 108-109

Atmospheric Processes and the Water Cycle (Earth and Space Science Unifying Concept A)

Earth systems have internal and external sources of energy, both of which create heat. Driven by sunlight and Earth's internal heat, a variety of cycles connect and continually circulate energy and material through the components of the earth systems.

E.5.A. Students understand the water cycle's relationship to weather.

E.5.A.5. Students know air is a substance that surrounds us, take up space, and moves around us as wind. I/S

Chapter 5, Lesson 1, Video A, SE page 91; Video C, SE page 93; Critical Thinking, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.1. Students know that there are more stars than anyone can easily count, but that are not scattered evenly, and they are not all the same brightness or color. W/L

See Level A:

Chapter 6, Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.2. Students know the solar system includes the Sun, planets, and moons. E/S

Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117; KnowZone, SE pages 118-119

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.3. Students know stars are like the Sun, but they are so far away that they look like points of light. W/L

Chapter 6, Lesson 1, Video A, SE page 113

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.4. Students know they are cyclical patterns of observable objects in the solar system. I/S

Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Critical Thinking, SE page 125; Process Skill, SE page 125

Earth in Space, SE page 205

Solar System and Universe (Earth and Space Science Unifying Concept B)

The universe is a dynamic system of matter and energy. The universe is extremely large and massive with its components separated by vast distances. Tools of technology continue to aid in the investigation of the components, origins, processes and age of the universe. Earth is one part of our solar system, which is within the Milky Way galaxy. The Sun is the energy-producing star for our solar system. Most objects in our solar system are in predictable motion, resulting in phenomena such as day/night, year, phases of the moon, tides, and eclipses.

E.5.B. Students understand that there are many components in the solar system including Earth.

E.5.B.5. Students know the patterns of stars in the sky stay the same (e.g., the constellations), although they appear to move across the sky nightly, and different stars can be seen in different seasons. (14.5.2) W/S

See Level A:

Chapter 6, Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.1. Students know fossils are evidence of past life. E/S

Chapter 2, Lesson 1, Video C, SE page 27

Chapter 4, Lesson 3, Video A, SE page 83

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.2. Students know water, wind, and ice constantly change the Earth's land surface by eroding rock and soil in some places and depositing them in other areas. E/S

Chapter 4, Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Writing in Science, SE page 81; Process Skill, SE page 81

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.3. Students know landforms may result from slow processes (e.g., erosion and deposition) and fast processes (e.g., volcanoes, earthquakes, landslides, flood, and human activity). E/S

Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical thinking, SE page 73; KnowZone, SE pages 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Process Skill, SE page 87

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.4. Students know rock is composed of different combinations of minerals. E/S

Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Critical Thinking, SE page 87; Writing in Science, SE page 87; Process Skill, SE page 87

Earth's Composition and Structure (Earth and Space Science Unifying Concept C)

Earth is composed of materials that move through the biogeochemical cycles. Earth's features are shaped by ongoing and dynamic processes. These processes can be constructive or destructive and occur over geologic time scales.

E.5.C. Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.

E.5.C.5. Students know soil varies from place to place and bas both biological and mineral components. E/S

Level C:

Chapter 4, Lesson 3, Video C, SE page 85

See also Level A:

Chapter 4, Lesson 2, Video C, SE page 77; Critical Thinking, SE page 79; Process Skill, SE page 79

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.1. Students know matter exists in different states (i.e., solid, liquid, gas) which have distinct physical properties. E/S

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.2. Students know heating and cooling can change some common materials, such as water, from one state to another. E/S

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.3. Students know materials can be classified by their observable physical and chemical properties (e.g., magnetism, conductivity, density, and solubility). E/S

Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147

Chapter 8, Lesson 2, Video A, SE page 163

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.4. Students know that, by combining two or more materials, the properties of that material can be different from the original materials. E/S

Chapter 7, Lesson 2, Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; Process Skill, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.5. Students know the mass of a material remains constant whether it is together, in parts, or in a different state. E/S

Chapter 7, Lesson 2, Video B, SE page 144

Matter (Physical Science Unifying Concept A)

Matter has various states with unique properties that can be used as a basis for organization. The relationship between properties of matter and its structure is an essential component of study in the physical sciences. The understanding of matter and its properties leads to practical applications, such as the capacity to liberate elements from ore, create new drugs, manipulate the structure of genes and synthesize polymers.

P.5.A. Students understand properties of objects and materials.

P.5.A.6. Students know materials are composed of parts that are too small to be seen without magnification. E/S

Chapter 7, Lesson 1, Video A, SE page 135; Critical Thinking, SE page 139; KnowZone, SE page 140-141

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.1. Students know that, when an unbalanced force is applied to an object, the object either speeds up, slows down, or goes in a different direction. E/S

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Process Skill, SE page 183; Lesson 3, video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197; Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.2. Students know how the strength of a force and mass of an object influence the amount of change in an object's motion. E/S

Chapter 9, Lesson 2, Video C, SE page 189; Lesson 3, Video B, SE page 194; Critical Thinking, SE page 197; Process Skill, SE page 197

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.3. Students know a magnetic force causes certain kinds of objects to attract and repel each other. E/S

See Level B:

Chapter 9, Lesson 2, Video A, SE page 185

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.4. Students know electrically charged particles can attract or repel other electrically charged material (e.g., static electricity). E/S

Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Critical Thinking, SE page 183; Process Skill, SE page 183

Force and Motion (Physical Science Unifying Concept B)

The laws of motion are used to describe the effects of forces on the movement of objects.

P.5.B. Students understand that forces can change the position and motion of an object.

P.5.B.5. Students know Earth's gravity pulls any object toward it without touching it. E/S

Chapter 9, Lesson 3, Video B, SE page 194

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.1. Students know light can be described in terms of simple properties (e.g., color, brightness, reflection). I/S

See Level A:

Chapter 9, Lesson 1, Video A, SE page 179; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

See also Level B:

Chapter 8, Lesson 2, Video A, SE page 163; Video C, SE page 165

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.2. Students know the wave characteristics of sound. E/S

See Level B:

Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Process Skill, SE page 161; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.3. Students know heat is often produced as a byproduct when one form of energy is converted to another form (e.g., when machines and living organisms convert stored energy to motion). E/S

Chapter 8, Lesson 1, Video A, SE page 157; Writing in Science, SE page 161; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.4. Students know heat can move from one object to another by conduction, and come materials conduct heat better than others. E/S

Chapter 8, Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Critical Thinking, SE page 167; Process Skill, SE page 167

Energy (Physical Science Unifying Concept C)

The total energy of the universe is constant. All events involve the transfer of energy in one form or another. IN all energy transfers, the overall effect is that the energy is spread out uniformly.

P.5.C. Students understand that energy exists in different forms.

P.5.C.5. Students know the organization of a simple electrical circuit (i.e., battery or generator, wire, a complete loop through which the electrical current can pass). I/L

Level C:

Chapter 9, Lesson 1, Video A, SE page 171; Video B, SE page 172

See also Level B:

Chapter 9, Lesson 1, Video C, SE page 181; Critical Thinking, SE page 183

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.1. Students know some physical characteristics and behaviors are inherited in animals and plants. E/S

Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; KnowZone, SE pages 36-37

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.2. Students know reproduction is an essential characteristic for the continuation of every species. E/S

Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Critical Thinking, SE page 35; Process Skill, SE page 35

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.3. Students know that, while offspring resemble their parents and each other, they also exhibit differences in characteristics. E/S

Chapter 2, Lesson 2, Video B, SE page 32

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A.4. Students know how to observe and describe variations among individuals within the human population. E/S

Chapter 2, Lesson 2, Video B, SE page 32

Heredity (Life Science Unifying Concept A)

Heredity is the genetic passing of a set of instructions from generation to generation. These instructions are encoded as DNA and may manifest themselves as characteristics. Some characteristics are inherited, and some result from interactions with the environment.

L.5.A. Students understand that some characteristics are inherited and some are not.

L.5.A. 5. Students know some animal behaviors are learned. E/S

Chapter 2, Lesson 2, Video C, SE page 33

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells, Cells range from very simple to complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B. Students understand that living things have specialized structures that perform a variety of life functions.

L.5.B.1. Students know plants and animals have structures that enable them to grow, reproduce, and survive. E/S

Chapter 2, Lesson 2, Video B, SE page 32; video C, SE page 33; Critical Thinking, SE page 35; KnowZone, SE pages 36-37

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells, Cells range from very simple to complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

L.5.B. Students understand that living things have specialized structures that perform a variety of life functions.

L.5.B.2. Students know living things have predictable life cycles. E/S

Level C:

Chapter 2, Lesson 2, Video A, SE page 31

See also Level A:

Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

See also Level B:

Chapter 1, Lesson 3, Video C, SE page 19

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.1. Students know the organization of simple food webs. E/S

Level C:

Chapter 3, Lesson 1, Video C, SE page 49

Food Web, SE page 203

Energy Pyramid, SE page 203

See also Level B:

Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Food Web, SE page 203

Energy Pyramid, SE page 203

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.2. Students know organisms interact with each other and with the non-living parts of their ecosystem. E/S

Chapter 2, Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43 Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.3. Students know changes to an environment can be beneficial or detrimental to different organisms. E/S

Chapter 2, Lesson 1, Video C, SE page 27; Lesson 3, Video C, SE page 41

Chapter 3, Lesson 1, Video B, SE page 48; Process Skill, SE page 51; Lesson 3, Video A, SE page 61; Video B, SE page 62

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.4. Students know all organisms, including humans, can cause changes in their environments. E/S

Chapter 2, Lesson 1, Video C, SE page 27

Chapter 3, Lesson 1, Video C, SE page 49; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63

Chapter 5, Lesson 2, Video C, SE page 49; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Organisms and Their Environment (Life Science Unifying Concept C)

A variety of ecosystems and communities exist on Earth. Ecosystems are dynamic interactions of organisms and their environment. Ecosystems have distinct characteristics and components that allow certain organisms to thrive. Change in one or more components can affect the entire ecosystem.

L.5.C. Students understand that there is a variety of ecosystems on Earth and organisms interact within their ecosystems.

L.5.C.5. Students know plants and animals have adaptations allowing them to survive in specific ecosystems. E/S

Chapter 2, Lesson 2, Video B, SE page 32; video C, SE page 33; Critical Thinking, SE page 35; KnowZone, SE pages 36-37

Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.1. Students know animals and plants can be classified according to their observable characteristics. E/S

Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Process Skill, SE page 29

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.2. Students know fossils are evidence of past life. E/S

Chapter 2, Lesson 1, Video C, SE page 27

Chapter 4, Lesson 3, Video A, SE page 83

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

L.5.D. Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L.5.D.3. Students know differences among individuals within a species give them advantages and/or disadvantages in surviving and reproducing. E/S

Chapter 2, Lesson 2, Video B, SE page 32