

**Main Criteria:** Utah Core Standards  
**Secondary Criteria:** Virtual Field Trips  
**Subjects:** Science, Social Studies  
**Grade:** 9  
**Correlation Options:** Show Correlated

**Utah Core Standards**  
**Science**

Grade: 9 - Adopted: 2003

<b>STANDARD / AREA OF LEARNING</b>	<b>UT.1.</b>	<b>Biology: Intended Learning Outcome: Use Science Process and Thinking Skills.</b>
<b>OBJECTIVE / STRAND</b>	1.b.	Use comparisons to help understand observations and phenomena.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
<b>OBJECTIVE / STRAND</b>	1.g.	Develop and use classification systems.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>STANDARD / AREA OF LEARNING</b>	<b>UT.2.</b>	<b>Biology: Intended Learning Outcome: Manifest Scientific Attitudes and Interests.</b>
<b>OBJECTIVE / STRAND</b>	2.d.	Accept responsibility for actively helping to resolve social, ethical and ecological problems related to science and technology.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 2 - Older Grades
<b>STANDARD / AREA OF LEARNING</b>	<b>UT.5.</b>	<b>Biology: Intended Learning Outcome: Demonstrate Awareness of Social and Historical Aspects of Science.</b>
<b>OBJECTIVE / STRAND</b>	5.a.	Cite examples of how science affects human life.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
<b>OBJECTIVE / STRAND</b>	5.c.	Understand the cumulative nature of scientific knowledge.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>OBJECTIVE / STRAND</b>	5.d.	Recognize contributions to science knowledge that have been made by both women and men.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>STANDARD / AREA OF LEARNING</b>	<b>UT.I.</b>	<b>Biology: Students will understand that living organisms interact with one another and their environment.</b>
<b>OBJECTIVE / STRAND</b>	1.1.	Summarize how energy flows through an ecosystem.
<b>INDICATOR / CLUSTER</b>	1.1.a.	Arrange components of a food chain according to energy flow.  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
<b>INDICATOR / CLUSTER</b>	1.1.c.	Describe strategies used by organisms to balance the energy expended to obtain food to the energy gained from the food (e.g.,

		<p>migration to areas of seasonal abundance, switching type of prey based upon availability, hibernation or dormancy).</p> <p><u>Virtual Field Trips</u> National Parks - West - Alaska &amp; Hawaii</p>
INDICATOR / CLUSTER	I.1.e.	<p>Research food production in various parts of the world (e.g., industrialized societies' greater use of fossil fuel in food production, human health related to food product).</p> <p><u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades</p>
STANDARD / AREA OF LEARNING	UT.I.	Biology: Students will understand that living organisms interact with one another and their environment.
OBJECTIVE / STRAND	I.2.	Explain relationships between matter cycles and organisms.
INDICATOR / CLUSTER	I.2.a.	<p>Use diagrams to trace the movement of matter through a cycle (i.e., carbon, oxygen, nitrogen, water) in a variety of biological communities and ecosystems.</p> <p><u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades</p>
INDICATOR / CLUSTER	I.2.b.	<p>Explain how water is a limiting factor in various ecosystems.</p> <p><u>Virtual Field Trips</u> National Parks West - Nevada, California National Parks West - Wyoming, Utah</p>
INDICATOR / CLUSTER	I.2.c.	<p>Distinguish between inference and evidence in a newspaper, magazine, journal, or Internet article that addresses an issue related to human impact on cycles of matter in an ecosystem and determine the bias in the article.</p> <p><u>Virtual Field Trips</u> National Parks of the Western Region - Part 1</p>
STANDARD / AREA OF LEARNING	UT.I.	Biology: Students will understand that living organisms interact with one another and their environment.
OBJECTIVE / STRAND	I.3.	Describe how interactions among organisms and their environment help shape ecosystems.
INDICATOR / CLUSTER	I.3.a.	<p>Categorize relationships among living things according to predator-prey, competition, and symbiosis.</p> <p><u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades</p>
INDICATOR / CLUSTER	I.3.b.	<p>Formulate and test a hypothesis specific to the effect of changing one variable upon another in a small ecosystem.</p> <p><u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska &amp; Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades</p>
INDICATOR / CLUSTER	I.3.c.	<p>Use data to interpret interactions among biotic and abiotic factors (e.g., pH, temperature, precipitation, populations, diversity) within an ecosystem.</p> <p><u>Virtual Field Trips</u></p>

		La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	I.3.d.	Investigate an ecosystem using methods of science to gather quantitative and qualitative data that describe the ecosystem in detail.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
INDICATOR / CLUSTER	I.3.e.	Research and evaluate local and global practices that affect ecosystems.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 2 - Older Grades
STANDARD / AREA OF LEARNING	UT.II.	Biology: Students will understand that all organisms are composed of one or more cells that are made of molecules, come from preexisting cells, and perform life functions.
OBJECTIVE / STRAND	II.2.	Describe the flow of energy and matter in cellular function.
INDICATOR / CLUSTER	II.2.b.	Illustrate the cycling of matter and the flow of energy through photosynthesis (e.g., by using light energy to combine CO <sub>2</sub> and H <sub>2</sub> O to produce oxygen and sugars) and respiration (e.g., by releasing energy from sugar and O <sub>2</sub> to produce CO <sub>2</sub> and H <sub>2</sub> O).  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
STANDARD / AREA OF LEARNING	UT.III.	Biology: Students will understand the relationship between structure and function of organs and organ systems.
OBJECTIVE / STRAND	III.1.	Describe the structure and function of organs.
INDICATOR / CLUSTER	III.1.a.	Diagram and label the structure of the primary components of representative organs in plants and animals (e.g., heart - muscle tissue, valves and chambers; lung - trachea, bronchial, alveoli; leaf - veins, stomata; stem - xylem, phloem, cambium; root - tip, elongation, hairs; skin - layers, sweat glands, oil glands, hair follicles; ovaries - ova, follicles, corpus luteum).  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	III.1.b.	Describe the function of various organs (e.g. heart, lungs, skin, leaf, stem, root, ovary).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	III.1.c.	Relate the structure of organs to the function of organs.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol

		La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	III.1.d.	Compare the structure and function of organs in one organism to the structure and function of organs in another organism.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
STANDARD / AREA OF LEARNING	UT.III.	Biology: Students will understand the relationship between structure and function of organs and organ systems.
OBJECTIVE / STRAND	III.2.	Describe the relationship between structure and function of organ systems in plants and animals.
INDICATOR / CLUSTER	III.2.b.	Describe the structure and function of various organ systems (i.e., digestion, respiration, circulation, protection and support, nervous) and how these systems contribute to homeostasis of the organism.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks West - Nevada, California
STANDARD / AREA OF LEARNING	UT.V.	Biology: Students will understand that biological diversity is a result of evolutionary processes.
OBJECTIVE / STRAND	V.1.	Relate principles of evolution to biological diversity.
INDICATOR / CLUSTER	V.1.c.	Relate reproductive isolation to speciation.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
STANDARD / AREA OF LEARNING	UT.V.	Biology: Students will understand that biological diversity is a result of evolutionary processes.
OBJECTIVE / STRAND	V.2.	Cite evidence for changes in populations over time and use concepts of evolution to explain these changes.
INDICATOR / CLUSTER	V.2.b.	Identify the role of mutation and recombination in evolution.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	V.2.c.	Relate the nature of science to the historical development of the theory of evolution.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	V.2.d.	Distinguish between observations and inferences in making interpretations related to evolution (e.g., observed similarities and differences in the beaks of Galapagos finches leads to the inference that they evolved from a common ancestor; observed similarities and differences in the structures of birds and reptiles leads to the inference that birds evolved from reptiles).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	V.2.e.	Review a scientific article and identify the research methods used to gather evidence that documents the evolution of a species.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
STANDARD / AREA OF LEARNING	UT.V.	Biology: Students will understand that biological diversity is a result of evolutionary processes.
OBJECTIVE / STRAND	V.3.	Classify organisms into a hierarchy of groups based on similarities that reflect their evolutionary relationships.

INDICATOR / CLUSTER	V.3.b.	Generalize criteria used for classification of organisms (e.g., dichotomy, structure, broad to specific).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	V.3.d.	Justify the ongoing changes to classification schemes used in biology.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
STANDARD / AREA OF LEARNING	UT.II.	Earth Systems Science: Students will understand that the features of Earth's evolving environment affect living systems, and that life on Earth is unique in the solar system.
OBJECTIVE / STRAND	II.2.	Analyze how ecosystems differ from each other due to abiotic and biotic factors.
INDICATOR / CLUSTER	II.2.a.	Observe and list abiotic factors (e.g., temperature, water, nutrients, sunlight, pH, topography) in specific ecosystems.  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	II.2.b.	Observe and list biotic factors (e.g., plants, animals, organic matter) that affect a specific ecosystem (e.g., wetlands, deserts, aquatic).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
INDICATOR / CLUSTER	II.2.c.	Predict how an ecosystem will change as a result of major changes in an abiotic and/or biotic factor.  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	II.2.d.	Explain that energy enters the vast majority of Earth's ecosystems through photosynthesis, and compare the path of energy through two different ecosystems.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	II.2.e.	Analyze interactions within an ecosystem (e.g., water temperature and fish species, weathering and water pH).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
INDICATOR / CLUSTER	II.2.f.	Plan and conduct an experiment to investigate how abiotic factors influence organisms and how organisms influence the physical environment.  <u>Virtual Field Trips</u>

		Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
<b>STANDARD / AREA OF LEARNING</b>	<b>UT.II.</b>	Earth Systems Science: Students will understand that the features of Earth's evolving environment affect living systems, and that life on Earth is unique in the solar system.
<b>OBJECTIVE / STRAND</b>	<b>II.3.</b>	Examine Earth's diversity of life as it changes over time.
<b>INDICATOR / CLUSTER</b>	<b>II.3.a.</b>	Observe and chart the diversity in a specific area.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks West - Nevada, California The Amazon Rainforest - Part 1 - Older Grades
<b>INDICATOR / CLUSTER</b>	<b>II.3.b.</b>	Compare the diversity of life in various biomes specific to number of species, biomass, and type of organisms.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
<b>INDICATOR / CLUSTER</b>	<b>II.3.c.</b>	Explain factors that contribute to the extinction of a species.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
<b>INDICATOR / CLUSTER</b>	<b>II.3.d.</b>	Compare evidence supporting various theories that explain the causes of large-scale extinctions in the past with factors causing the loss of species today.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
<b>INDICATOR / CLUSTER</b>	<b>II.3.e.</b>	Evaluate the biological, esthetic, ethical, social, or economic arguments with regard to maintaining biodiversity.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 2 - Older Grades
<b>STANDARD / AREA OF LEARNING</b>	<b>UT.III.</b>	Earth Systems Science: Students will understand that gravity, density, and convection move Earth's plates and this movement causes the plates to impact other Earth systems.
<b>OBJECTIVE / STRAND</b>	<b>III.1.</b>	Explain the evidence that supports the theory of plate tectonics.
<b>INDICATOR / CLUSTER</b>	<b>III.1.a.</b>	Define and describe the location of the major plates and plate boundaries.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
<b>INDICATOR / CLUSTER</b>	<b>III.1.b.</b>	Compare the movement and results of movement along convergent, divergent, and transform plate boundaries.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol

		National Parks - West - Alaska & Hawaii National Parks West - Wyoming, Utah
INDICATOR / CLUSTER	III.1.c.	Relate the location of earthquakes and volcanoes to plate boundaries.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	III.1.e.	Evaluate the evidence for the current theory of plate tectonics.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1
STANDARD / AREA OF LEARNING	UT.III.	Earth Systems Science: Students will understand that gravity, density, and convection move Earth's plates and this movement causes the plates to impact other Earth systems.
OBJECTIVE / STRAND	III.2.	Describe the processes within Earth that result in plate motion and relate it to changes in other Earth systems.
INDICATOR / CLUSTER	III.2.b.	Model the movement of materials within Earth.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks West - Wyoming, Utah
INDICATOR / CLUSTER	III.2.c.	Model the movement and interaction of plates.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	III.2.d.	Relate the movement and interaction of plates to volcanic eruptions, mountain building, and climate changes.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1
INDICATOR / CLUSTER	III.2.e.	Predict the effects of plate movement on other Earth systems (e.g., volcanic eruptions affect weather, mountain building diverts waterways, uplift changes elevation that alters plant and animal diversity, upwelling from ocean vents results in changes in biomass).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol National Parks West - Nevada, California National Parks West - Wyoming, Utah
STANDARD / AREA OF LEARNING	UT.IV.	Earth Systems Science: Students will understand that water cycles through and between reservoirs in the hydrosphere and affects the other spheres of the Earth system.
OBJECTIVE / STRAND	IV.1.	Explain the water cycle in terms of its reservoirs, the movement between reservoirs, and the energy to move water. Evaluate the importance of freshwater to the biosphere.
INDICATOR / CLUSTER	IV.1.a.	Identify the reservoirs of Earth's water cycle (e.g., ocean, ice caps/glaciers, atmosphere, lakes, rivers, biosphere, groundwater) locally and globally, and graph or chart relative amounts in global reservoirs.  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol)

		National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	IV.1.b.	Illustrate the movement of water on Earth and describe how the processes that move water (e.g., evaporation of water, melting of ice/snow, ocean currents, movement of water vapor by wind) use energy from the sun.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	IV.1.d.	Make inferences about the quality and/or quantity of freshwater, using data collected from local water systems.  <u>Virtual Field Trips</u> National Parks West - Nevada, California
INDICATOR / CLUSTER	IV.1.e.	Analyze how communities deal with water shortages, distribution, and quality in designing a long-term water use plan.  <u>Virtual Field Trips</u> National Parks West - Nevada, California
STANDARD / AREA OF LEARNING	UT.IV.	Earth Systems Science: Students will understand that water cycles through and between reservoirs in the hydrosphere and affects the other spheres of the Earth system.
OBJECTIVE / STRAND	IV.2.	Analyze the physical and biological dynamics of the oceans.
INDICATOR / CLUSTER	IV.2.a.	Describe the physical dynamics of the oceans (e.g., wave action, ocean currents, El Nino, tides).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	IV.2.b.	Determine how physical properties of oceans affect organisms (e.g., salinity, depth, tides, temperature).  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	IV.2.c.	Model energy flow in ocean ecosystems.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	IV.2.e.	Describe how changing sea levels could affect life on Earth.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1
STANDARD / AREA OF LEARNING	UT.V.	Earth Systems Science: Students will understand that Earth's atmosphere interacts with and is altered by the lithosphere, hydrosphere, and biosphere.
OBJECTIVE / STRAND	V.1.	Describe how matter in the atmosphere cycles through other Earth systems.
INDICATOR / CLUSTER	V.1.a.	Trace movement of a carbon atom from the atmosphere through a plant, animal, and decomposer, and back into the atmosphere.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
INDICATOR / CLUSTER	V.1.b.	Diagram the nitrogen cycle and provide examples of human actions that affect this cycle (e.g., fertilizers, crop rotation, fossil fuel combustion).



		<u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
INDICATOR / CLUSTER	V.1.d.	Research ways the biosphere, hydrosphere, and lithosphere interact with the atmosphere (e.g., volcanic eruptions putting ash and gases into the atmosphere, hurricanes, changes in vegetation).  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
STANDARD / AREA OF LEARNING	UT.V.	Earth Systems Science: Students will understand that Earth's atmosphere interacts with and is altered by the lithosphere, hydrosphere, and biosphere.
OBJECTIVE / STRAND	V.2.	Trace ways in which the atmosphere has been altered by living systems and has itself strongly affected living systems over the course of Earth's history.
INDICATOR / CLUSTER	V.2.c.	Compare the rate at which CO <sub>2</sub> is put into the atmosphere to the rate at which it is removed through the carbon cycle.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
INDICATOR / CLUSTER	V.2.e.	Research, evaluate, and report on international efforts to protect the atmosphere.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
STANDARD / AREA OF LEARNING	UT.VI.	Earth Systems Science: Students will understand the source and distribution of energy on Earth and its effects on Earth systems.
OBJECTIVE / STRAND	VI.1.	Describe the transformation of solar energy into heat and chemical energy on Earth and eventually the radiation of energy to space.
INDICATOR / CLUSTER	VI.1.f.	Research global changes and relate them to Earth systems (e.g., global warming, solar fluctuations).  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks of the Western Region - Part 1
STANDARD / AREA OF LEARNING	UT.VI.	Earth Systems Science: Students will understand the source and distribution of energy on Earth and its effects on Earth systems.
OBJECTIVE / STRAND	VI.2.	Relate energy sources and transformation to the effects on Earth systems.
INDICATOR / CLUSTER	VI.2.b.	Describe the effect of solar energy on the determination of climate and weather (e.g., El Nino, solar intensity).  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades
INDICATOR / CLUSTER	VI.2.c.	Explain how uneven heating at the equator and polar regions creates atmospheric and oceanic convection currents that move heat energy around Earth.  <u>Virtual Field Trips</u> Galapagos Islands - Espagnol
INDICATOR / CLUSTER	VI.2.e.	Relate how weather patterns are the result of interactions among ocean currents, air currents, and topography.  <u>Virtual Field Trips</u> National Parks West - Nevada, California National Parks of the Western Region - Part 1
STANDARD / AREA OF LEARNING	UT.1.	Physics: Intended Learning Outcome: Use Science Process and Thinking Skills.
OBJECTIVE / STRAND	1.i.	Use mathematics as a precise method for showing relationships.

		<u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii
STANDARD / AREA OF LEARNING	UT.I.	Physics: Students will understand how to measure, calculate, and describe the motion of an object in terms of position, time, velocity, and acceleration.
OBJECTIVE / STRAND	I.1.	Describe the motion of an object in terms of position, time, and velocity. (Related Internet Resources)
INDICATOR / CLUSTER	I.1.a.	Calculate the average velocity of a moving object using data obtained from measurements of position of the object at two or more times.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii
INDICATOR / CLUSTER	I.1.d.	Determine and compare the average and instantaneous velocity of an object from data showing its position at given times.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii
STANDARD / AREA OF LEARNING	UT.I.	Physics: Students will understand how to measure, calculate, and describe the motion of an object in terms of position, time, velocity, and acceleration.
OBJECTIVE / STRAND	I.2.	Analyze the motion of an object in terms of velocity, time, and acceleration. (Related Internet Resources)
INDICATOR / CLUSTER	I.2.b.	Describe the velocity of an object when its acceleration is zero.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii
INDICATOR / CLUSTER	I.2.e.	Analyze the velocity and acceleration of an object over time.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii

### Utah Core Standards

#### Social Studies

Grade: 9 - Adopted: 2016

STANDARD / AREA OF LEARNING	UT.USI.	UNITED STATES HISTORY I
OBJECTIVE / STRAND	USI.4.	THE U. S. CONSTITUTION (Ca. 1781–1789)
INDICATOR / CLUSTER		American independence brought with it the need for self-government. Dissatisfaction with inadequate early political structures led to the creation of the Constitution. The Constitutional Convention brought together the greatest political minds of the fledgling nation. Through debate and compromise, the Founding Fathers brought together in a unique way the principles and philosophies that had been theorized and tested for centuries. The Bill of Rights was then added, enumerating the rights of American citizens. In the end, the Constitution and Bill of Rights created the structure of a government that has functioned, survived crises, and evolved for over two centuries, affecting the life of every citizen today.
EXPECTATION / STANDARD	USI.4.2.	Students will describe the structure and function of the government that the Constitution creates.  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12
STANDARD / AREA OF LEARNING	UT.WG.	WORLD GEOGRAPHY
OBJECTIVE / STRAND	WG.1.	HUMANS AND THEIR PHYSICAL ENVIRONMENT

INDICATOR / CLUSTER		The earth's physical environment varies greatly from place to place. The interactions between physical systems and human systems create opportunities and challenges for people and places. The implications of these interactions affect both physical systems and human systems.
EXPECTATION / STANDARD	WG.1.2.	Students will identify patterns evident in the geographic distribution of ecosystems and biomes and explain how humans interact with them.  <u>Virtual Field Trips</u> National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
STANDARD / AREA OF LEARNING	UT.WG.	WORLD GEOGRAPHY
OBJECTIVE / STRAND	WG.2.	POPULATION DISTRIBUTION AND MIGRATION
INDICATOR / CLUSTER		The movement and distribution of people is influenced by many factors, including environmental, cultural, economic, and geopolitical forces. These migration trends alter geographic conditions. Geographers use data to understand population distribution and migration by looking at population characteristics, push and pull factors, and numerous other variables. Analyzing this data offers an opportunity to examine complex and challenging real-world issues.
EXPECTATION / STANDARD	WG.2.3.	Students will investigate the effects of significant patterns of human movement that shape urban and rural environments over time, such as mass urbanization, immigration, and the movement of refugees.  <u>Virtual Field Trips</u> Barcelona - English Barcelona - Espagnol Paris - City of Light - Grades 6 - 12 Paris - La Ville Lumiere (En Francais)
STANDARD / AREA OF LEARNING	UT.WG.	WORLD GEOGRAPHY
OBJECTIVE / STRAND	WG.3.	CULTURE
INDICATOR / CLUSTER		Culture is the total sum of human expression. A culture's purpose, as well as how and where cultures originate, diffuse, and change, are all topics worth studying. Students will explore religion, language, ethnicity and other cultural characteristics by looking at patterns and processes. As students explore what people care about and care for, they can learn not only about other cultures but also about the unique attributes of their own culture.
EXPECTATION / STANDARD	WG.3.1.	Students will identify and describe the essential defining characteristics and functions of culture.  <u>Virtual Field Trips</u> La Selva Amazonica - Pte 1 (En Espagnol) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / STANDARD	WG.3.2.	Students will explain how the physical environment influences and is influenced by culture.  <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / STANDARD	WG.3.3.	Students will identify how culture influences sense of place, point of view and perspective, and the relative value placed upon people

		and places. <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / STANDARD	WG.3.4.	Students will identify the causes, methods, and effects for the diffusion and distribution of cultural characteristics among different places and regions. <u>Virtual Field Trips</u> The Amazon Rainforest - Part 2 - Older Grades
EXPECTATION / STANDARD	WG.3.5.	Students will explain how the basic tenets of world religions affect the daily lives of people. <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
STANDARD / AREA OF LEARNING	UT.WG.	WORLD GEOGRAPHY
OBJECTIVE / STRAND	WG.4.	POLITICAL SYSTEMS
INDICATOR / CLUSTER		People organize themselves into distinctive groups. Geographers examine how the interactions between these groups influence the division and control of the earth's surface. Political systems have profound influences on the lives of people, including their access to resources, economic opportunities, and basic rights.
EXPECTATION / STANDARD	WG.4.2.	Students will describe and explain the role physical and human characteristics play in establishing political boundaries. <u>Virtual Field Trips</u> Barcelona - English Barcelona - Espagnol La Selva Amazonica - Pte 1 (En Espagnol) National Parks - West - Alaska & Hawaii National Parks West - Nevada, California National Parks West - Wyoming, Utah National Parks of the Western Region - Part 1 Paris - City of Light - Grades 6 - 12 Paris - La Ville Lumiere (En Francais) The Amazon Rainforest - Part 1 - Older Grades The Amazon Rainforest - Part 2 - Older Grades
STANDARD / AREA OF LEARNING	UT.WH.	WORLD HISTORY
OBJECTIVE / STRAND	WH.2.	THE RISE OF CLASSICAL SOCIETIES (Ca. 1000 B.C.E.–900 C.E.)
INDICATOR / CLUSTER		The classical civilizations of the Mediterranean (Egypt, ancient Israel, Greece, and Rome), Persia, China, India, and other regions have had a significant impact on global belief systems, legal systems, governments, culture, and social systems. Some developed vast empires, consolidating government power in revolutionary and influential structures. Emerging contacts between civilization centers began the diffusion of ideas and technologies. Classical civilizations rose and fell under remarkably similar circumstances, exhibiting global patterns.
EXPECTATION / STANDARD	WH.2.1.	Students will identify and explain patterns in the development and diffusion and syncretism of world religions and philosophies, including Judaism, Hinduism, Greek philosophy, Confucianism, Buddhism, Christianity, and Islam. <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
EXPECTATION / STANDARD	WH.2.4.	Students will explain the impact of early trans-regional trade on the diffusion of religion, ideas, technology, and other aspects of culture.

		<u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
EXPECTATION / STANDARD	WH.2.5.	Students will construct an argument for the significant and enduring political, economic, technological, social, or other cultural contributions of classical civilizations.  <u>Virtual Field Trips</u> Jerusalem - Then and Now (Older Grades)
STANDARD / AREA OF LEARNING	UT.USG.	UNITED STATES GOVERNMENT AND CITIZENSHIP
OBJECTIVE / STRAND	USG.1.	FOUNDATIONAL PRINCIPLES
INDICATOR / CLUSTER		The framework of the United States Constitution and the functions of government are guided by principles essential for our way of life. An understanding of how these principles are applied in the rule of law, government, and politics is vital in order to be a responsible and effective citizen. Students need to be able to see how the ideals found in the Constitution are present in many of the issues of the day.
EXPECTATION / STANDARD	USG.1.2.	Students will describe the structure of the United States' form of government as a compound constitutional republic, including the ideas of federalism; checks and balances; separation of powers; commerce, elastic, and supremacy clauses; popular sovereignty; and limited government.  <u>Virtual Field Trips</u> Washington, DC - Grades 6 - 12
STANDARD / AREA OF LEARNING	UT.USG.	UNITED STATES GOVERNMENT AND CITIZENSHIP
OBJECTIVE / STRAND	USG.4.	FISCAL POLICIES AND DECISIONS
INDICATOR / CLUSTER		Fiscal policies can have profound implications in the daily lives of citizens. An essential component of understanding government and civics rests in deliberating government's role in the economy. Informed citizens understand taxation, budgets, and debt as these concepts relate to the government. Students use this understanding of basic economic principles to make informed decisions, knowing that economic policies are a reflection of economic philosophies and values.
EXPECTATION / STANDARD	USG.4.2.	Students will explain how government services and other budget priorities are funded through various forms of revenue streams, such as fees, bonding, and regressive and progressive taxes, including property taxes, income taxes, and sales taxes.  <u>Virtual Field Trips</u> Barcelona - English Barcelona - Espagnol