DRAFT CROSSWALK

Excellence in Environmental Education: Guidelines for Learning K-12 **(NAAEE) and Oregon Achievement Standards**

EE Learner Guidelines	Eighth Grade	High School
Strand 1: Questioning, Analysis & Interpretation Skills		
A) Questioning – Learners are able to develop, modify, clarify, and explain questions that guide environmental investigations of various types. They understand factors that influence the questions they pose.	**Science** 8.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world based on observations and science principles that includes proposing questions or hypotheses and designing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. 8.3S.1 Based on observations and science principles propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools, techniques, independent and dependent variables, and controls to collect relevant data.	**Science** H.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world by a systematic process that includes proposing a testable question or hypothesis and developing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. H.3S.1 Based on observations and science principles formulate a question or hypothesis that can be investigated through the collection and analysis of relevant information.
B) Designing investigations—Learners know how to design investigations to answer particular questions about the environment. They are able to develop approaches for investigating unfamiliar types of problems and phenomena.	**Science** 8.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world based on observations and science principles that includes proposing questions or hypotheses and designing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. 8.3S.1 Based on observations and science principles propose questions or hypotheses that can be examined through scientific	**Science** H.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world by a systematic process that includes proposing a testable question or hypothesis and developing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. H.3S.2 Design and conduct a controlled experiment, field study, or other investigation to make systematic observations about the natural world, including the collection of sufficient and appropriate data.

	investigation. Design and conduct a scientific investigation that uses appropriate tools, techniques, independent and dependent variables, and controls to collect relevant data.	**Math** H.1S Analysis: Analyze and interpret empirical data. H.1S.1 Given a context, determine appropriate survey methods, analyze the strengths and limitations of a particular survey, observational study, experiment, or simulation, and the display of its data. **Educational Technology**.3 Research and Information Fluency: Students select and apply digital tools to gather, evaluate, validate, and use information. ET.3.A Plan strategies to guide inquiry.
C) Collecting Information—Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data.	**Science** 8.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world based on observations and science principles that includes proposing questions or hypotheses and designing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. 8.3S.1 Based on observations and science principles propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools, techniques, independent and dependent variables, and controls to collect relevant data. **Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues.	**Science** H.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world by a systematic process that includes proposing a testable question or hypothesis and developing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. H.3S.3 Analyze data and identify uncertainties. Draw a valid conclusion, explain how it is supported by the evidence, and communicate the findings of a scientific investigation. **Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.HS.HS.01 Access information and resources to meet specific health needs and solve health-related problems. **Educational Technology**.3 Research and Information Fluency: Students select and apply

	HE.08.HS.01 Access home, school and community resources to meet specific health and safety needs. **Social Sciences** Acquire and organize materials from primary and secondary sources. SS.05.SA.02 Gather, use, and document information from multiple sources (e.g. print, electronic, human, primary, secondary)	digital tools to gather, evaluate, validate, and use information. ET.3.B Locate, organize and use information ethically from a variety of sources and media.
D) Evaluating accuracy and reliability— Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources.	**Science** **8**.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world based on observations and science principles that includes proposing questions or hypotheses and designing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. 8.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of a scientific investigation, and communicate the conclusions including possible sources of error. Suggest new investigations based on analysis of results. **Social Sciences** Historical Skills: Identify and analyze diverse perspectives on and historical interpretation of historical issues and events. SS.08.HS.04 Evaluate data within the context in which it was created, testing its reliability, credibility, and bias. **Math** 8.2 Data Analysis and Algebra: Analyze and summarize data sets.	**Science** H.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world by a systematic process that includes proposing a testable question or hypothesis and developing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. H.3S.3 Analyze data and identify uncertainties. Draw a valid conclusion, explain how it is supported by the evidence, and communicate the findings of a scientific investigation. H.3S.4 Identify examples from the history of science that illustrate modification of scientific knowledge in light of challenges to prevailing explanations. **Social Sciences** Historical Skills: Identify and analyze diverse perspectives on and historical interpretation of historical issues and events. SS.HS.HS.04 Understand how contemporary perspectives affect historical interpretation. **Math** H.1S Analysis: Analyze and interpret empirical data. H.1S.2 Evaluate data-based reports by considering the source of the data, the design of the study, and the way the data was analyzed and displayed.

	8.2.7 Identify claims based on statistical data and evaluate the reasonableness of those claims.	**Educational Technology** 3 Research and Information Fluency: Students select and apply digital tools to gather, evaluate, validate, and use information. ET.3.C Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
E) Organizing Information—Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes.	**Science** 8.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world based on observations and science principles that includes proposing questions or hypotheses and designing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. 8.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of a scientific investigation, and communicate the conclusions including possible sources of error. Suggest new investigations based on analysis of results. **Math** 8.1 Algebra: Analyze and represent linear functions, and solve linear equations and systems of linear equations. 8.1.1 Translate among contextual, verbal, tabular, graphical, and algebraic representations of linear functions. 8.1.2 Determine the slope of a line and understand that it is a constant rate of change. **Math** 8.2 Data Analysis and Algebra: Analyze and summarize data sets.	**Math** H.1S Analysis: Analyze and interpret empirical data. H.1S.4 Use or construct a scatter plot for a given data set, determine whether there is a (n) linear, quadratic, exponential, or no trend. If linear, determine if there is a positive or negative correlation among the data; and, if appropriate, sketch a line of best fit, and use it to make predictions. H.1S.5 Construct, analyze, and interpret tables, scatter plots, frequency distributions, and histograms of data sets. **Educational Technology** 3 Research and Information Fluency: Students select and apply digital tools to gather, evaluate, validate, and use information. ET.3.D Analyze, evaluate, and summarize information or data and report results.

	8.2.1 Organize and display data (e.g., histograms, box-and-whisker plots, scatter plots) to pose and answer questions; and justify the reasonableness of the choice of display	
F) Working with models and simulations—Learners are able to create, use, and evaluate models to understand environmental phenomena.	**Social Sciences** Use maps and other geographic tools and technologies to acquire, process, and report information from a spatial perspective. SS.08.GE.02 Read, interpret, and understand how to construct geographic representations to analyze information, understand spatial relationships, and compare places. SS.08.GE.02.01 Use maps, charts, graphs, and photographs to analyze spatial distributions and patterns. **Social Sciences** Locate major physical and human (cultural) features of the Earth. SS.08.GE.03 Locate and identify on maps and globes the regions of the world and their prominent physical features. SS.08.GE.03.01 Identify the location of major mountain ranges, deserts, rivers, cultural regions and countries in the world.	**Social Sciences** Understand the spatial concepts of location, distance, direction, scale, movement, and region. SS.HS.GE.01 Understand and use geographic information using a variety of scales, patterns of distribution, and arrangement. SS.HS.GE.01.01 Understand the advantages and disadvantages of using various geographic representations to depict and solve geographic problems. **Social Sciences** Use maps and other geographic tools and technologies to acquire, process, and report information from a spatial perspective. SS.HS.GE.02 Interpret and evaluate information using complex geographic representations. SS.HS.GE.02.01 Use a variety of geographic representations to analyze information and draw conclusions about geographic issues. **Social Sciences** Locate major physical and human (cultural) features of the Earth. SS.HS.GE.03 Locate and identify places, regions, and geographic features that have played prominent roles in historical or contemporary issues and events. SS.HS.GE.03.01 Locate, identify, and explain changes in countries over time. SS.HS.GE.03.02 Locate and identify places and regions most prominent in contemporary events in Oregon, the United States, and the world. **Educational Technology** 1 Creativity and

		Innovation: Students demonstrate creative thinking and problem solving skills to develop innovative products and processes using (digital) technology. ET.1.C Develop or apply models and simulations to explore complex systems, issues and trends.
G) Drawing conclusions and developing explanations—Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	**Science** 8.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world based on observations and science principles that includes proposing questions or hypotheses and designing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. 8.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of a scientific investigation, and communicate the conclusions including possible sources of error. Suggest new investigations based on analysis of results. **Math 8.1 Algebra: Analyze and represent linear functions, and solve linear equations and systems of linear equations.** 8.1.3 Identify and interpret the properties (i.e. slope, intercepts, continuity, and discreteness) of linear relationships as they are shown in the different representations and recognize proportional relationships (y/x = k or y = kx) as a special case. 8.1.4 Use linear functions and equations to represent, analyze and solve problems, and to make predictions and inferences. 8.1.5 Relate systems of two linear equations in two variables and their solutions to pairs of	**Science** H.3 Scientific Inquiry: Scientific inquiry is the investigation of the natural world by a systematic process that includes proposing a testable question or hypothesis and developing procedures for questioning, collecting, analyzing, and interpreting multiple forms of accurate and relevant data to produce justifiable evidence-based explanations and new explorations. H.3S.3 Analyze data and identify uncertainties. Draw a valid conclusion, explain how it is supported by the evidence, and communicate the findings of a scientific investigation. **Math** H.1S Analysis: Analyze and interpret empirical data. H.1S.3 Compare and draw conclusions about two or more data sets using graphical displays or central tendencies and range. **Educational Technology** 1 Creativity and Innovation: Students demonstrate creative thinking and problem solving skills to develop innovative products and processes using (digital) technology. ET.1.A Apply existing knowledge to forecast possibilities and generate new ideas, products or processes. ET.1.B Create original works as a means of personal or group expression.

	lines that are intersecting, parallel, or the same line. 8.1.6 Use informal strategies (e.g., graphs or tables) to solve problems involving systems of linear equations in two variables. **<u>Math</u> 8.2 Data Analysis and Algebra: Analyze and summarize data sets.** 8.2.2 Use measures of center and spread to summarize and compare data sets. 8.2.3 Interpret and analyze displays of data and descriptive statistics. 8.2.4 Compare descriptive statistics and evaluate how changes in data affect those statistics. 8.2.5 Describe the strengths and limitations of a particular statistical measure, and justify or critique its use in a given situation. 8.2.6 Use sample data to make predictions regarding a population. 8.2.8 Use data to estimate the likelihood of future events and evaluate the reasonableness of predictions.	

EE Learner Guidelines	**Eighth Grade**	**High School**
Strand 2: Environmental Process and Systems		
2.1:Earth as a Physical System		
A) Processes that shape the Earth— Learners understand the major physical processes that shape the Earth. They can relate these processes, especially those that are	**<u>Science</u>** 6.1 Structure and Function: Living and non-living systems are organized groups of related parts that function together and have characteristics and properties. 6.1E.1 Describe and compare the properties and composition of the layers of Earth.	**<u>Science</u>** H.1 Structure and Function: A system's characteristics, form, and function are attributed to the quantity, type, and nature of its components. H.1E.2 Describe the structure and composition of Earth's atmosphere, geosphere, and hydrosphere.

large-scale and long-term, to characteristics of the Earth.	**Science** 8.2 Interaction and Change: Systems interact with other systems. 5.2E.1 Explain how the energy from the sun affects Earth's weather and climate. 6.2E.1 Explain the water cycle and the relationship to landforms and weather. 7.2E.2 Describe the composition of Earth's atmosphere, how it has changed over time, and implications for the future. 7.2E.4 Explain how landforms change over time at various rates in terms of constructive and destructive forces. 8.2E.1 Explain how gravity is the force that keeps objects in the solar system in regular and predictable motion and describe the resulting phenomena. Explain the interactions that result in Earth's seasons. 8.2E.2 Describe the processes of Earth's geosphere and the resulting major geological events. 8.2E.3 Explain the causes of patterns of atmospheric and oceanic movement and the effects on weather and climate. 8.2E.4 Analyze evidence for geologic, climatic, environmental, and life form changes over time.	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2E.2 Explain how Earth's atmosphere, geosphere, and hydrosphere change over time and at varying rates. Explain techniques used to elucidate the history of events on Earth. H.2E.3 Describe how the universe, galaxies, stars, and planets evolve over time.
B) Changes in matter— Learners apply their understanding of chemical reactions to round out their explanations of environmental characteristics and everyday phenomena.	**Science** 8.1 Structure and Function: Systems and their components function at various levels of complexity. 8.1P.1 Describe the atomic model and explain how the types and arrangements of atoms determine the physical and chemical properties of elements and compounds.	**Science** H.1 Structure and Function: A system's characteristics, form, and function are attributed to the quantity, type, and nature of its components. H.1P.1 Explain how atomic structure is related to the properties of elements and their position in the Periodic Table. Explain how the composition of the nucleus is related to isotopes and radioactivity.

	8.1P.3 Explain how the motion and spacing of particles determines states of matter. **Science** 8.2 Interaction and Change: Systems interact with other systems. 8.2P.1 Compare and contrast physical and chemical changes and describe how the law of conservation of mass applies to these changes.	H.1P.2 Describe how different types and strengths of bonds affect the physical and chemical properties of compounds. **Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2P.1 Explain how chemical reactions result from the making and breaking of bonds in a process that absorbs or releases energy. Explain how the rate of a chemical reaction is affected by temperature, pressure, and concentration. H.2P.2 Explain how physical and chemical changes demonstrate the law of conservation of mass. H.2P.3 Describe the interactions of energy and matter including the law of conservation of energy.
C) Energy—Learners apply their knowledge of energy and matter to understand phenomena in the world around them.	**Science** 6.1 Structure and Function: Living and non-living systems are organized groups of related parts that function together and have characteristics and properties. 6.1P.2 Compare and contrast the characteristic properties of forms of energy. 8.2 Interaction and Change: Systems interact with other systems. 8.2P.2 Explain how energy is transferred, transformed, and conserved. 8.2E.4 Analyze evidence for geologic, climatic, environmental, and life form changes over time.	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2P.3 Describe the interactions of energy and matter including the law of conservation of energy.

EE Learner Guidelines	Eighth Grade	High School
2.2: Living Environment		
A) Organisms, populations, and communities— Learners understand basic population dynamics and the importance of diversity in living systems.	**Science** 5.1 Structure and Function: Living and non-living things are composed of related parts that function together to form systems. 5.1L.1 Explain that organisms are composed of parts that function together to form a living system. **Science** 6.2 Interaction and Change: The related parts within a system interact and change. 6.2L.2 Explain how individual organisms and populations in an ecosystem interact and how changes in populations are related to resources.	**Science** H.1 Structure and Function: A system's characteristics, form, and function are attributed to the quantity, type, and nature of its components. H.1L.4 Explain how cellular processes and cellular differentiation are regulated both internally and externally in response to the environments in which they exist.
B) Heredity and evolution—Learners understand the basic ideas and genetic mechanisms behind biological evolution.	**Science** 8.1 Structure and Function: Systems and their components function at various levels of complexity. 7.1L.1 Compare and contrast sexual and asexual reproduction. Explain why reproduction is essential to the continuation of every species. 7.1L.2 Distinguish between inherited and learned traits, explain how inherited traits are passed from generation to generation, and describe the relationships among phenotype, genotype, chromosomes, and genes. 8.1L.1 Explain how genetics and anatomical characteristics are used to classify organisms and infer evolutionary relationships. **Science** 8.2 Interaction and Change: Systems interact with other systems. 8.2L.1 Explain how species change through the	**Science** H.1 Structure and Function: A system's characteristics, form, and function are attributed to the quantity, type, and nature of its components. H.1L.3 Explain and apply laws of heredity and their relationship to the structure and function of DNA. **Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2L.3 Describe how asexual and sexual reproduction affect genetic diversity. H.2L.4 Explain how biological evolution is the consequence of the interactions of genetic variation, reproduction and inheritance, natural selection, and time.

	process of natural selection. Describe evidence for evolution. 8.2E.4 Analyze evidence for geologic, climatic, environmental, and life form changes over time.	H.2L.5 Explain how multiple lines of scientific evidence support biological evolution.
C) Systems and connections—Learners understand the living environment to be comprised of interrelated, dynamic systems.	**Science** 8.2 Interaction and Change: Systems interact with other systems. 5.2L.1 Explain the interdependence of plants, animals, and environment, and how adaptation influences survival. 6.2L.2 Explain how individual organisms and populations in an ecosystem interact and how changes in populations are related to resources. 8.2E.4 Analyze evidence for geologic, climatic, environmental, and life form changes over time.	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2L.1 Explain how energy and chemical elements pass through systems. Describe how chemical elements are combined and recombined in different ways as they cycle through the various levels of organization in biological systems.
D) Flow of matter and energy—Learners are able to account for environmental characteristics based on their knowledge of how matter and energy interact in living systems.	**Science** 7.2 Interaction and Change: The components and processes within a system interact. 7.2L.2 Explain the processes by which plants and animals obtain energy and materials for growth and metabolism.	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2L.1 Explain how energy and chemical elements pass through systems. Describe how chemical elements are combined and recombined in different ways as they cycle through the various levels of organization in biological systems. H.2E.1 Identify and predict the effect of energy sources, physical forces, and transfer processes that occur in the Earth system. Describe how matter and energy are cycled between system components over time.

EE Learner Guidelines	Eighth Grade	High School
2.3: Humans & their Societies		
A) Individuals and groups— Learners understand the influence of individual and group actions on the environment, and how groups can work to promote and balance interests.	Social Studies Compare and analyze physical (e.g., landforms, vegetation, wildlife, climate, and natural hazards) and human (e.g., population, land use, language, and religion) characteristics of places and regions. SS.08.GE.04 Identify and compare physical and human characteristics of major regions and significant places in the world. *SS.08.GE.04.02 Identify, locate, and compare the cultural characteristics of places and regions.* *SS.08.GE.04.03 Recognize relationships between the physical and cultural characteristics of a place or region.* Social Studies Understand how people and the environment are interrelated. SS.08.GE.07 Understand how human modification of the physical environment in a place affects both that place and other places. *SS.08.GE.07.01 Understand how the process of urbanization affects the physical environment of a place, the cultural characteristics of a place, and the physical and human characteristics of the surrounding region.* *SS.08.GE.07.02 Understand how clearing vegetation affects the physical environment of a place and other places.*	**Science** H.4 Engineering Design: Engineering design is a process of formulating problem statements, identifying criteria and constraints, proposing and testing possible solutions, incorporating modifications based on test data, and communicating the recommendations. H.4D.6 Evaluate ways that ethics, public opinion, and government policy influence the work of engineers and scientists, and how the results of their work impact human society and the environment.
B) Culture—Learners understand cultural perspectives and dynamics and apply their understanding in context.		

C) Political and economic systems—Learners understand how different political and economic systems account for, manage, and affect natural resources and environmental quality.	**Social Sciences** Understand the organization, responsibilities, and interrelationships of local, state, and federal governments in the United States. SS.05.CG.02 Identify the primary functions of federal, state, and local governments. SS.05.CG.02.01 Identify public safety, transportation, education, and recreation as responsibilities of local governments. SS.08.CG.02 Identify and distinguish how powers and responsibilities are distributed and balanced among the federal, state, and local levels. SS.08.CG.02.01 Identify the power or responsibility of each level of government. SS.08.CG.02.02 Understand how laws are made and enforced at the federal, state, and local levels. **Social Sciences** Understand how government is influenced and changed by support and dissent of individuals, groups, and international organizations. SS.05.CG.06 Identify and give examples of how individuals can influence the actions of government. SS.05.CG.06.01 Identify and give examples of actions citizens can take to influence government policy and decision-making. SS.08.CG.06 Identify and give examples of how groups and organizations can influence the actions of government. SS.08.CG.06.01 Identify and give examples of how groups and organizations can influence government policy or decisions	**Social Sciences** Understand the organization, responsibilities, and interrelationships of local, state, and federal governments in the United States. SS.HS.CG.02 Understand the interrelationship between local, state, and federal government. SS.HS.CG.02.01 Understand the primary function of federal, state, and local levels of government and how the actions of one influence the workings of the others. SS.HS.CG.02.02 Understand how federalism creates shared and reserved powers at each level of government. **Social Sciences** Understand how government is influenced and changed by support and dissent of individuals, groups, and international organizations. SS.HS.CG.06 Understand how government policies and decisions have been influenced and changed by individuals, groups, and international organizations. SS.HS.CG.06.01 Understand how U.S. political parties have influenced government policy and decisions. SS.HS.CG.06.02 Understand the causes, course, and impact of the civil rights/equal rights movements. SS.HS.CG.06.03 Understand the Constitutional changes that resulted from major events in the 20th century. **Social Sciences** Understand that resources are limited (e.g., scarcity). SS.HS.EC.01 Understand how specialization and competition influence the allocation of resources. SS.HS.EC.01.01 Understand how specialization increases efficiency, potential output, and consumer well being, but may have negative side effects

	and describe how these actions can lead to such influence. **Social Sciences** Understand that resources are limited (e.g., scarcity). SS.05.EC.01 Understand that all economic choices have costs and benefits, and compare options in terms of costs and benefits. SS.05.EC.01.01 Know that whenever a choice is made, there is a cost. SS.08.EC.01 Understand incentives in a market economy that influence individuals and businesses in allocating resources (time, money, labor, and natural resources). SS.08.EC.01.01 Know that people respond predictably to positive and negative incentives. **Social Sciences** Understand economic trade-offs and how choices result in both costs and benefits to individuals and society. SS.05.EC.02 Identify and give examples of the concepts of "trade-off" and "opportunity costs." SS.05.EC.02.01 Identify and give examples of consequences of economic choices in terms of tradeoff and opportunity cost. SS.05.EC.02.02 Understand the difference between "needs" and "wants" and their relationship to economic trade-offs. SS.08.EC.02 Understand how trade-offs and opportunity costs can be identified and measured. SS.08.EC.02.01 Know and give examples	**Social Sciences** Understand economic trade-offs and how choices result in both costs and benefits to individuals and society. SS.HS.EC.02 Understand a cost-benefit analysis of economic choices. SS.HS.EC.02.01 Compare and contrast the allocation of goods and services in market and command economies. SS.HS.EC.02.02 Understand how people make decisions by analyzing economic conditions and changes. **Social Sciences** Understand how conditions in an economy influence and are influenced by the decisions of consumers, producers, economic institutions, and government. SS.HS.EC.03 Understand how consumer demand and market price directly impact one another. SS.HS.EC.03.01 Understand that competition among sellers leads to lower prices and impacts production. SS.HS.EC.03.02 Understand that competition among buyers increases prices and allocates goods and services only to those who can afford them. **Social Sciences** Understand the interdependence of the global economy and the role played by the United States. SS.HS.EC.07 Understand the purposes and functions of major international economic organizations and the role of the United States in them. SS.HS.EC.07.01 Understand the purpose and function of international economic agencies and groups and how the United States interacts with people in other nations through these groups.

	of how changes in the economy impose costs on some and benefits on others because they arbitrarily redistribute purchasing power. SS.08.EC.02.02 Distinguish between "needs" and "wants" in the U.S. and other countries of the world, and the impact of the media. **Social Sciences** Understand how conditions in an economy influence and are influenced by the decisions of consumers, producers, economic institutions, and government. SS.05.EC.03 Understand how supply and demand influence price, and how price increases or decreases influence the decisions of consumers. SS.05.EC.03.01 Understand that prices rise and fall depending on supply and demand. SS.08.EC.03 Understand how price is an incentive for both buyers and producers/sellers in the marketplace. SS.08.EC.03.01 Understand how supply and demand respond predictably to changes in economic circumstances.	
D) Global connections— Learners are able to analyze global, social, cultural, political, economic, and environmental linkages.	**Social Sciences** Understand how nations interact with each other, how events and issues in other countries can affect citizens in the United States, and how actions and concepts of democracy and individual rights of the United States can affect other peoples and nations. SS.05.CG.07 Recognize and give examples of how nations interact with one another through trade, diplomacy, cultural contacts, treaties, and agreements.	**Social Sciences** Understand how nations interact with each other, how events and issues in other countries can affect citizens in the United States, and how actions and concepts of democracy and individual rights of the United States can affect other peoples and nations. SS.HS.CG.07 Understand the purposes and functions of major international organizations and the role of the United States in them. SS.HS.CG.07.01 Understand and give examples of how international organizations influence policies or

	SS.05.CG.07.01 Know how the United States makes treaties with other nations, including Indian nations. SS.05.CG.07.02 Know how nations demonstrate good will toward other nations in a variety of ways. SS.08.CG.07 Understand how actions of the U.S. government affect citizens of both the United States and other countries. SS.08.CG.07.01 Know how the U.S. government affects citizens of other countries. SS.08.CG.07.02 Know how U.S. government actions with other nations affect citizens of the United States. **Social Sciences** Understand the interdependence of the global economy and the role played by the United States. SS.08.EC.06 Identify and give examples of how the United States economy affects citizens of both the United States and other countries. SS.08.EC.06.01 Give examples of how the United States economy affects citizens of the United States. SS.08.EC.06.02 Give examples of how the United States economy affects citizens of other countries.	decisions. SS.HS.CG.07.02 Understand the purposes and functions of the United Nations, and the role of the United States in the United Nations. SS.HS.CG.07.03 Understand the purpose and function of international humanitarian agencies and special interest advocacy groups, and how the United States interacts with people in other nations through these organizations.
E) Change and conflict— Learners understand the functioning of public processes for promoting and managing change and conflict, and can analyze their effects on the environment.		

EE Learner Guidelines	Eighth Grade	High School
2.4: Environment & Society		
A) Human/environment interactions—Learners understand that humans are able to alter the physical environment to meet their needs and that there are limits to the ability of the environment to absorb impacts or meet human needs.	**Science** 7.2 Interaction and Change: The components and processes within a system interact. 7.2E.1 Describe and evaluate the environmental and societal effects of obtaining, using, and managing waste of renewable and non-renewable resources. 7.2E.3 Evaluate natural processes and human activities that affect global environmental change and suggest and evaluate possible solutions to problems. **Social Sciences** Understand how people and the environment are interrelated. SS.05.GE.07 Understand how physical environments are affected by human activities. SS.05.GE.07.01 Understand how and why people alter the physical environment. SS.05.GE.07.02 Describe how human activity can impact the environment. SS.05.GE.08 Understand how human activities are affected by the physical environment. SS.05.GE.08.01 Identify constraints on human activity caused by the physical environment. SS.05.GE.08.02 Understand how the physical environment presents opportunities for economic and recreational activity. SS.08.GE.07 Understand how human modification of the physical environment in a	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2E.4 Evaluate the impact of human activities on environmental quality and the sustainability of Earth systems. Describe how environmental factors influence resource management. . **Social Sciences** Understand how people and the environment are interrelated. SS.HS.GE.07 Understand human modifications of the physical environment and analyze their global impacts and consequences for human activity. SS.HS.GE.07.01 Distinguish between renewable resources and non-renewable resources and the global consequences of mismanagement. SS.HS.GE.07.02 Identify and understand different methods of extracting and using resources, and analyze and compare the effect on the environment. SS.HS.GE.08 Identify and give examples of changes in a physical environment, and evaluate their impact on human activity in the environment. SS.HS.GE.08.01 Identify and give examples of changes in human activity due to changes in the physical environment, and analyze the impact on both. **Social Sciences** Historical Skills: Analyze cause and effect relationships, including multiple causalities. SS.HS.HS.02 Compare and contrast institutions and

	place affects both that place and other places. SS.08.GE.07.01 Understand how the process of urbanization affects the physical environment of a place, the cultural characteristics of a place, and the physical and human characteristics of the surrounding region. SS.08.GE.07.02 Understand how clearing vegetation affects the physical environment of a place and other places. SS.08.GE.08 Understand how changes in a physical environment affect human activity. SS.08.GE.08.01 Understand how changes in the physical environment can increase or diminish capacity to support human activity. SS.08.GE.08.02 Understand how climatic events or climate change affect human activity. SS.08.GE.08.03 Predict how changes in an ecosystem (not caused by human activity) might influence human activity. **Social Sciences** Historical Skills: Analyze cause and effect relationships, including multiple causalities. SS.05.HS.02 Identify cause and effect relationships in a sequence of events. SS.08.HS.02 Distinguish between cause and effect relationships and events that happen or occur concurrently or sequentially.	ideas in history, noting cause and effect relationships. **Social Sciences** Historical Skills: Understand, recognize, and interpret change and continuity over time. SS.HS.HS.03 Recognize and interpret continuity and/or change with respect to particular historical developments in the 20th century.

B) Places—Learners understand "place" as humans endowing a particular part of the Earth with meaning through their interactions with that environment.	**Social Sciences** Locate major physical and human (cultural) features of the Earth. SS.05.GE.03.03 Locate, identify, and know the significance of major mountains, rivers, and land regions of Oregon. SS.08.GE.03 Locate and identify on maps and globes the regions of the world and their prominent physical features. SS.08.GE.03.01 Identify the location of major mountain ranges, deserts, rivers, cultural regions and countries in the world. **Social Sciences** Compare and analyze physical (e.g., landforms, vegetation, wildlife, climate, and natural hazards) and human (e.g., population, land use, language, and religion) characteristics of places and regions. SS.05.GE.04 Identify physical and human characteristics of regions in the United States and the processes that have shaped them. SS.05.GE.04.01 Identify and locate major landforms, bodies of water, vegetation, and climate found in regions of the United States. SS.05.GE.04.02 Identify the type of economic activity, population distribution, and cities found in regions of the United States. SS.08.GE.04 Identify and compare physical and human characteristics of major regions and significant places in the world. SS.08.GE.04.01 Locate and identify population centers and geographic reasons for their locations. SS.08.GE.04.02 Identify, locate, and compare the cultural characteristics of places and regions.	**Social Sciences** Locate major physical and human (cultural) features of the Earth. SS.HS.GE.03 Locate and identify places, regions, and geographic features that have played prominent roles in historical or contemporary issues and events. SS.HS.GE.03.01 Locate, identify, and explain changes in countries over time. SS.HS.GE.03.02 Locate and identify places and regions most prominent in contemporary events in Oregon, the United States, and the world. **Social Sciences** Compare and analyze physical (e.g., landforms, vegetation, wildlife, climate, and natural hazards) and human (e.g., population, land use, language, and religion) characteristics of places and regions. SS.HS.GE.04 Analyze changes in the physical and human characteristics of places and regions, and the effects of technology, migration, and urbanization on them. SS.HS.GE.04.01 Apply geographic tools to identify change in a place over time, and to infer reasons for the change. **Social Sciences** Analyze the causes of human migration (e.g., density, food and water supply, transportation and communication systems) and its effects (e.g., impact on physical and human systems). SS.HS.GE.05 Understand how worldwide transportation and communication patterns have affected the flow and interactions of people, ideas, and products. SS.HS.GE.05.01 Understand how transportation and communication systems of the present compare to those of the past, and how this changes perceptions of space and time.

	SS.08.GE.04.03 Recognize relationships between the physical and cultural characteristics of a place or region. **Social Sciences** Analyze the causes of human migration (e.g., density, food and water supply, transportation and communication systems) and its effects (e.g., impact on physical and human systems). SS.05.GE.05 Identify patterns of migration and cultural interaction in the United States. SS.05.GE.05.01 Understand how physical geography affects the routes, flow, and destinations of migration. SS.05.GE.05.02 Explain how migrations affect the culture of emigrants and native populations. SS.08.GE.05 Identify and understand worldwide patterns of population distribution, migration, and cultural diffusion and interactions. SS.08.GE.05.01 Identify patterns of population distribution and infer causes. SS.08.GE.05.02 Recognize and identify patterns of migration streams in U.S. history. SS.08.GE.05.03 Understand how migration streams affect the spread of cultural traits. **Art** Understand how the arts can reflect the environment and personal experiences within a society or culture, and apply to one's own work. AR.08.HC.03 Explain how works of art from around the world reflect the artist's environment, society and culture.	SS.HS.GE.05.02 Understand how communication and transportation technologies contribute to trade and cultural convergence. **Art** Understand how the arts can reflect the environment and personal experiences within a society or culture, and apply to one's own work. AR.HS.HC.03 Explain how works of art reflect the artist's personal experience, environment, society and culture and apply this knowledge to one's own work.

C) Resources—Learners understand that the importance and use of resources change over time and vary under different economic and technological systems.	**Science** 7.2 Interaction and Change: The components and processes within a system interact. 7.2E.1 Describe and evaluate the environmental and societal effects of obtaining, using, and managing waste of renewable and non-renewable resources.	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2E.4 Evaluate the impact of human activities on environmental quality and the sustainability of Earth systems. Describe how environmental factors influence resource management.
D) Technology—Learners are able to examine the social and environmental impacts of various technologies and technological systems.	**Science** 8.4 Engineering Design: Engineering design is a process of identifying needs, defining problems, identifying design criteria and constraints, developing solutions, and evaluating proposed solutions. 8.4D.3 Explain how creating a new technology requires considering societal goals, costs, priorities, and trade-offs.	**Science** H.4 Engineering Design: Engineering design is a process of formulating problem statements, identifying criteria and constraints, proposing and testing possible solutions, incorporating modifications based on test data, and communicating the recommendations. H.4D.6 Evaluate ways that ethics, public opinion, and government policy influence the work of engineers and scientists, and how the results of their work impact human society and the environment.
E) Environmental issues—Learners are familiar with a range of environmental issues at scales that range from local to national to global. They understand that these scales and issues are often linked.	**Social Sciences** Understand economic, cultural, and environmental factors that influence changes in population, and evaluate the consequences of the resulting increases or decreases in population. SS.05.GE.06 Identify and give examples of issues related to population increases and decreases. SS.05.GE.06.01 Identify and give examples of positive and negative impacts of population increases or decreases. SS.08.GE.06 Identify economic, cultural, and environmental factors that affect population, and predict how the population would change as a result. SS.08.GE.06.01 Identify and give examples of economic, cultural, and environmental factors	**Science** H.2 Interaction and Change: The components in a system can interact in dynamic ways that may result in change. In systems, changes occur with a flow of energy and/or transfer of matter. H.2E.4 Evaluate the impact of human activities on environmental quality and the sustainability of Earth systems. Describe how environmental factors influence resource management. **Social Sciences** Analyze the causes of human migration (e.g., density, food and water supply, transportation and communication systems) and its effects (e.g., impact on physical and human systems). SS.HS.GE.05 Understand how worldwide transportation and communication patterns have affected the flow and interactions of people, ideas, and products.

	that influence population. SS.08.GE.06.02 Predict the effect of a given economic, cultural, or environmental change on a population.	SS.HS.GE.05.01 Understand how transportation and communication systems of the present compare to those of the past, and how this changes perceptions of space and time. SS.HS.GE.05.02 Understand how communication and transportation technologies contribute to trade and cultural convergence.

EE Learner Guidelines	Eighth Grade	High School
Strand 3 – Skills for Understanding Environmental Issues		
3.1: Skills for Analyzing & Investigating		
A) Identifying and investigating issues— Learners apply their research and analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope.	**Science** 7.2 Interaction and Change: The components and processes within a system interact. 7.2E.1 Describe and evaluate the environmental and societal effects of obtaining, using, and managing waste of renewable and non-renewable resources. 7.2E.3 Evaluate natural processes and human activities that affect global environmental change and suggest and evaluate possible solutions to problems. **Science** 8.4 Engineering Design: Engineering design is a process of identifying needs, defining problems, identifying design criteria and constraints, developing solutions, and evaluating proposed solutions. 8.4D.1 Define a problem that addresses a need, and using relevant science principles	**Science** H.4 Engineering Design: Engineering design is a process of formulating problem statements, identifying criteria and constraints, proposing and testing possible solutions, incorporating modifications based on test data, and communicating the recommendations. H.4D.1 Define a problem and specify criteria for a solution within specific constraints or limits based on science principles. Generate several possible solutions to a problem and use the concept of trade-offs to compare them in terms of criteria and constraints. **Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.HS.HS.03 Analyze influences on health related choices (e.g., personal/family/cultural values, media, technology, peers, body image, emotions, physical and social environments, and public health policies).

	investigate possible solutions given specified criteria, constraints, priorities, and trade-offs. **Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.08.HS.03 Analyze influences on health and well-being (e.g., culture, family, media, technology, peers, body image, emotions, and physical and social environments). **Social Sciences** Define and clarify an issue so that its dimensions are well understood. SS.05.SA.01 Examine an event, issue, or problem through inquiry and research. SS.08.SA.01 Clarify key aspects of an event, issue, or problem through inquiry and research. **Social Sciences** Acquire and organize materials from primary and secondary sources. SS.05.SA.02 Gather, use, and document information from multiple sources (e.g. print, electronic, human, primary, secondary). SS.08.SA.02 Gather, interpret, use, and document information from multiple sources, distinguishing facts from opinions and recognizing points of view.	**Social Sciences** Define and clarify an issue so that its dimensions are well understood. SS.HS.SA.01 Define, research, and explain an event, issue, problem, or phenomenon and its significance to society. **Social Sciences** Acquire and organize materials from primary and secondary sources. SS.HS.SA.02 Gather, analyze, use, and document information from various sources, distinguishing facts, opinions, inferences, biases, stereotypes, and persuasive appeals. SS.HS.SA.03 Understand what it means to be a critical consumer of information. **Educational Technology**.4 Critical Thinking, Problem Solving and Decision Making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. ET.4.A Identify and define authentic problems and significant questions for investigation. ET.4.B Plan and manage activities to develop a solution or complete a project. ET.4.C Collect and analyze data to identify solutions and or make informed decisions.
B) Sorting out the consequences of issues— Learners are able to evaluate the consequences of specific environmental changes, conditions, and issues for human and	**Science** 8.4 Engineering Design: Engineering design is a process of identifying needs, defining problems, identifying design criteria and constraints, developing solutions, and evaluating proposed solutions.	**Social Sciences** Identify and analyze an issue. SS.HS.SA.05 Analyze an event, issue, problem, or phenomenon, identifying characteristics, influences, causes, and both short- and long-term effects.

ecological systems.	8.4D.1 Define a problem that addresses a need, and using relevant science principles investigate possible solutions given specified criteria, constraints, priorities, and trade-offs. **Social Sciences** Identify and analyze an issue. SS.05.SA.04 Identify characteristics of an event, issue, or problem, suggesting possible causes and results. SS.08.SA.04 Examine the various characteristics, causes, and effects of an event, issue, or problem.	
C) Identifying and evaluating alternative solutions and courses of action—Learners are able to identify and propose action strategies that are likely to be effective in particular situations and for particular purposes.	**Science** 7.2 Interaction and Change: The components and processes within a system interact. 7.2E.3 Evaluate natural processes and human activities that affect global environmental change and suggest and evaluate possible solutions to problems. **Science** 8.4 Engineering Design: Engineering design is a process of identifying needs, defining problems, identifying design criteria and constraints, developing solutions, and evaluating proposed solutions. 8.4D.2 Design, construct, and test a proposed engineering design solution and collect relevant data. Evaluate a proposed design solution in terms of design and performance criteria, constraints, priorities, and trade-offs. Identify possible design improvements. **Social Sciences** Select a course of action to resolve an issue. SS.05.SA.05 Identify a response or solution and support why it makes sense, using support from research.	**Science** H.4 Engineering Design: Engineering design is a process of formulating problem statements, identifying criteria and constraints, proposing and testing possible solutions, incorporating modifications based on test data, and communicating the recommendations. H.4D.2 Create and test or otherwise analyze at least one of the more promising solutions. Collect and process relevant data. Incorporate modifications based on data from testing or other analysis. H.4D.3 Analyze data, identify uncertainties, and display data so that the implications for the solution being tested are clear. H.4D.4 Recommend a proposed solution, identify its strengths and weaknesses, and describe how it is better than alternative designs. Identify further engineering that might be done to refine the recommendations. **Social Sciences** Select a course of action to resolve an issue. SS.HS.SA.06 Propose, compare, and judge multiple responses, alternatives, or solutions; then reach a defensible, supported conclusion. **Math** H.2S Probability: Apply basic principles of

	SS.08.SA.05 Consider two or more outcomes, responses, or solutions; identify their strengths and weaknesses; then conclude and justify which is the best.	probability. H.2S.1 Identify, analyze, and use experimental and theoretical probability to estimate and calculate the probability of simple events. H.2S.3 Compute and interpret probabilities for independent, dependent, complementary, and compound events using various methods (e.g., diagrams, tables, area models, and counting techniques).
D) Working with flexibility, creativity, and openness—While environmental issues investigations can bring to the surface deeply held views, learners are able to engage each other in peer review conducted in the spirit of open inquiry.	**Social Sciences** Explain various perspectives on an event or issue and the reasoning behind them. SS.05.SA.03 Identify and study two or more points of view of an event, issue, or problem. SS.08.SA.03 Examine a controversial event, issue, or problem from more than one perspective. **Art** Express ideas, moods and feelings through the arts and evaluate how well a work of art expresses one's intent. AR.08.CP.03 Create, present and/or perform a work of art by controlling essential elements and organizational principles to express an intended idea, mood or feeling.	**Social Sciences** Historical Skills: Identify and analyze diverse perspectives on and historical interpretation of historical issues and events. SS.HS.HS.04 Understand how contemporary perspectives affect historical interpretation. **Social Sciences** Explain various perspectives on an event or issue and the reasoning behind them. SS.HS.SA.04 Analyze an event, issue, problem, or phenomenon from varied or opposed perspectives or points of view. **Art** Express ideas, moods and feelings through the arts and evaluate how well a work of art expresses one's intent. AR.HS.CP.03 Create, present and/or perform a work of art by controlling essential elements and organizational principles and describe how well the work expresses an intended idea, mood or feeling. **Educational Technology** .2 Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, across the global community, to support individual learning and contribute to the learning of others.

		ET.2.A Interact and collaborate with peers, experts, or others employing a variety of digital environments and media. ET.2.B Effectively communicate and publish to multiple audiences using a variety of media and formats. ET.2.C Engage with learners from other cultures to develop cultural understanding and global awareness. ET.2.D Contribute to project teams. Produce original works or solve problems in a team setting.
3.2: Decision-making and Citizenship Skills		
A) Forming and evaluating personal views—Students are able to communicate, evaluate, and justify their own views on environmental issues and alternative ways to address them.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.08.HS.04 Demonstrate effective communication, peer resistance, assertiveness and conflict resolution skills. HE.08.HS.05 Use a goal-setting model to set short- and long-term goals for healthy living.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.HS.HS.04 Communicate effectively, using peer resistance, assertiveness, conflict resolution skills, and negotiation and refusal skills to avoid unsafe situations. HE.HS.HS.05 Set short- and long-term goals that promote healthy living. **Educational Technology** 4 Critical Thinking, Problem Solving and Decision Making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. ET.4.D Use multiple processes and diverse perspectives to explore alternative solutions.
B) Evaluating the need for citizen action— Learners are able to decide whether action is needed in particular situations and whether they should be involved.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.08.HS.06 Use a decision-making model that will enhance health and well-being.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.HS.HS.06 Use a decision-making model to make lifelong healthy decisions.

C) Planning and taking action— Learners know how to plan for action based on their research and analysis of an environmental issue. If appropriate, they take actions that are within the scope of their rights and consistent with their abilities and responsibilities as citizens.	**Science** 8.4 Engineering Design: Engineering design is a process of identifying needs, defining problems, identifying design criteria and constraints, developing solutions, and evaluating proposed solutions. 8.4D.2 Design, construct, and test a proposed engineering design solution and collect relevant data. Evaluate a proposed design solution in terms of design and performance criteria, constraints, priorities, and trade-offs. Identify possible design improvements. **Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.08.HS.06 Use a decision-making model that will enhance health and well-being.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.HS.HS.06 Use a decision-making model to make lifelong healthy decisions.
D) Evaluating the results of actions—Learners are able to evaluate the effects of their own actions and actions taken by other individuals and groups.		

EE Learner Guidelines	Eighth Grade	High School
Strand 4: Personal and Civic Responsibility		
A) Understanding societal values and principles—Learners know how to analyze the influence of shared and conflicting societal values.		**Science** H.4 Engineering Design: Engineering design is a process of formulating problem statements, identifying criteria and constraints, proposing and testing possible solutions, incorporating modifications based on test data, and communicating the recommendations. H.4D.6 Evaluate ways that ethics, public opinion, and

		government policy influence the work of engineers and scientists, and how the results of their work impact human society and the environment.
B) Recognizing citizens' rights and responsibilities— Learners understand the importance of exercising the rights and responsibilities of citizenship.	**Social Sciences** Understand personal and political rights of citizens in the United States. SS.05.CG.04 Identify the rights of U.S. citizens. SS.05.CG.04.01 Identify basic rights that are given to citizens of the United States. SS.08.CG.04 Understand citizens' rights and how the Constitution protects those rights. SS.08.CG.04.01 Identify and understand the rights of citizens guaranteed under the Bill of Rights. **Social Sciences** Understand participatory responsibilities of citizens in the community (voluntarism) and in the political process (becoming informed about public issues and candidates, joining political parties/interest groups/associations, communicating with public officials, voting, influencing lawmaking through such processes as petitions/initiatives). SS.05.CG.05 Understand how citizens can learn about public issues. SS.08.CG.05 Understand how citizens can make their voices heard in the political process. *SS.08.CG.05.01 Identify and give examples of ways that citizens can let their opinions be known in the political process.*	**Social Sciences** Understand personal and political rights of citizens in the United States. SS.HS.CG.04 Understand the role of the courts and of the law in protecting the rights of U.S. citizens. SS.HS.CG.04.01 Understand how the Bill of Rights offers protection of individual rights and how rights are limited for the benefit of the common good. SS.HS.CG.04.02 Understand the role of due process in the protection of individuals. SS.HS.CG.04.03 Understand how the rights of citizens have been augmented by case law decisions. **Social Sciences** Understand participatory responsibilities of citizens in the community (voluntarism) and in the political process (becoming informed about public issues and candidates, joining political parties/interest groups/associations, communicating with public officials, voting, influencing lawmaking through such processes as petitions/initiatives). SS.HS.CG.05 Understand the civic responsibilities of U.S. citizens and how they are met. SS.HS.CG.05.01 Identify the responsibilities of citizens in the United States and understand what an individual can do to meet these responsibilities.
C) Recognizing efficacy—Learners possess a realistic self-confidence in their effectiveness as citizens.		

D) Accepting personal responsibility— Learners understand that their actions can have broad consequences and accept responsibility for recognizing those effects and changing their actions when necessary.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.08.HS.07 Advocate to self, peers, family and community members, the benefits of health- and safety-enhancing practices.	**Health** Demonstrate ability to use health skills, to obtain and interpret health information, to manage personal behaviors and to advocate for healthy and safety issues. HE.HS.HS.07 Advocate to self, peers, family and community members, the importance of participating in health-enhancing behaviors and abstaining from unsafe behaviors. **Educational Technology** 5 Digital Citizenship: Students understand human, cultural, and societal issues related to digital technology and practice legal, ethical, and responsible behavior. ET.5.C Demonstrate personal responsibility for lifelong learning.