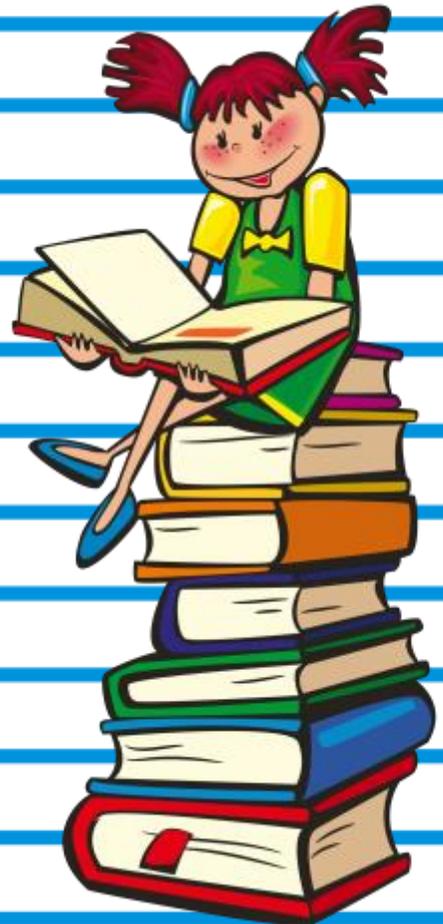


2nd and 3rd
Grade

Unit Topic
Standards
2017-18



(Note: This document only lists Arizona
Science and Social Studies standards.)

FIRST TWO WEEKS OF GEOGRAPHY UNITS & PASSPORT

Recognize different types of maps (e.g., political, physical) serve various purposes.

Identify characteristics of maps and globes: Interpret political and physical maps using the following elements: compass rose, symbols, key/legend, alpha numeric grids, title, compass rose - cardinal directions, legend, scale

Construct a map of a familiar place (e.g., classroom, bedroom, playground) that includes a title, compass rose, symbols, and key/legend.

Locate Arizona on a map of the United States.

Locate and recognize physical and human features using maps, illustrations, images, or globes: Recognize characteristics of human and physical features:

physical (i.e., four oceans, seven continents, river, lake, mountain range, coast, sea, desert gulf, bay, strait, plain, valley, volcano, peninsula)

human (i.e., equator, Northern and Southern, Hemispheres, North and South Poles, city, state, country, roads, railroads)

Discuss that different types of maps (e.g., political, physical, thematic) serve various purposes.

Construct maps using symbols to represent human and physical features.

Construct charts and graphs to display geographic information.

Discuss human features (e.g., cities, parks, railroad tracks, hospitals, shops, schools) in the world.

Discuss physical features (e.g., mountains, rivers, deserts) in the world.

Recognize through images of content studied (e.g., Egypt, Arizona, local community) that places have distinct characteristics.

Discuss the ways places change over time.

Identify through images of content studied (e.g., Japan, China, United States) how places have distinct characteristics.

Locate major physical and human features from content studied (e.g., Greece, Canada, Spain, United States) on maps and globes.

Describe how physical and human characteristics of places change from past to present.

Discuss housing and land use in urban and rural communities.

Describe the reasons-(e.g., jobs, climate, family) for human settlement patterns.

Recognize the connections between city, state, country, and continent.

Determine the relative location of objects using the terms near/far, behind/in front, over/under, left/right, up/down.

August 21- September 1: Body Systems

Additional Health Standards May be covered in this unit

Understand that basic structures in plants and animals serve a function.

- Identify animal structures that serve different functions (e.g., sensory, defense, locomotion).

- Identify the following major parts of:
 - the digestive system – mouth, esophagus, stomach, small and large intestines
 - respiratory system – nose, trachea, lungs, diaphragm
 - circulatory system – heart, arteries, veins, blood

- Describe the basic functions of the following systems:
 - digestive – breakdown and absorption of food, disposal of waste
 - respiratory – exchange of oxygen and carbon dioxide
 - circulatory – transportation of nutrients and oxygen throughout the body

September 5-15: Archaeology & Geography / Ancient Mesopotamia

Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied

Discuss the major economic activities and land use (e.g., natural resources, agricultural, industrial, residential, commercial, recreational) of areas studied.

Discuss that Ancient Civilizations have changed from past to present.

Discuss that different types of maps (e.g., political, physical, thematic) serve various purposes.

Construct maps using symbols to represent human and physical features.

Construct charts and graphs to display geographic information.

September 18-29: Ecosystems & Grasslands

- Identify components of familiar systems (e.g., organs of the digestive system, bicycle).
- Identify the following characteristics of a system: consists of multiple parts or subsystems parts work interdependently
- Identify parts of a system too small to be seen (e.g., plant and animal cells).
- Describe how, in a system (e.g., terrarium, house) with many components, the components usually influence one another.
- Explain why a system may not work if a component is defective or missing.
- Identify the following as characteristics of living things:
 - growth and development
 - reproduction
 - response to stimulus
- Compare the following observable features of living things:
 - movement – legs, wings
 - protection – skin, feathers, tree bark
 - respiration – lungs, gills
 - support – plant stems, tree trunks
- Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.
- Identify animal structures that serve different functions (e.g., sensory, defense, locomotion).
- Describe the function of the following plant structures:
 - roots – absorb nutrients
 - stems – provide support
 - leaves – synthesize food
 - flowers – attract pollinators and produce seeds for reproduction
- Identify stages of human life (e.g., infancy, adolescence, adulthood).
- Identify similarities and differences between animals and their parents.
- Describe the life cycles of various insects.

- Describe the life cycles of various mammals.
- Compare the life cycles of various organisms.
- Compare life cycles of various plants (e.g., conifers, flowering plants, ferns).
- Explain how growth, death, and decay are part of the plant life cycle.
- Understand the relationships among various organisms and their environment.
- Identify some plants and animals that exist in the local environment.
- Compare the habitats (e.g., desert, forest, prairie, water, underground) in which plants and animals live.
- Describe how plants and animals within a habitat are dependent on each other.
- Identify the living and nonliving components of an ecosystem.
- Examine an ecosystem to identify microscopic and macroscopic organisms.
- Explain the interrelationships among plants and animals in different environments:
 - producers – plants
 - consumers – animals
 - decomposers – fungi, insects, bacteria
- Identify, compare, and describe plants and animals in various habitats.
- Explain the relationships among plants and animals in different environments.
- Describe how plants and animals cause change in their environment.
- Describe how environmental factors (e.g., soil composition, range of temperature, quantity and quality of light or water) in the ecosystem may affect a member organism's ability to grow, reproduce, and thrive.
- Identify plant and animal adaptations.
- Identify adaptations of plants and animals that allow them to live in specific environments.
- Describe ways that species adapt when introduced into new environments.
- Cite examples of how a species' inability to adapt to changing conditions in the ecosystem led to the extinction of that species.
- Describe major factors that impact human populations and the environment.
- Describe ways species adapt to environments and what happens if they cannot adapt.

October 2-6: Economics

- *Discuss how land in the students' community is used for industry, housing, business, agriculture, and recreation.*
- *Describe how people earn a living in the community and the places they work.*
- Discuss the difference between basic needs and wants.
- Recognize that people need to make choices because of limited resources.
- Recognize that some goods are made locally and some are made elsewhere.
- Recognize that people are buyers and sellers of goods and services.
- *Recognize various forms of U.S. currency.*
- Recognize that people save money for future goods and services.
- Discuss how scarcity requires people to make choices due to their unlimited needs and wants with limited resources.
- Discuss that opportunity cost occurs when people make choices and something is given up (e.g., if you go to the movies, you can't also go to the park).
- Identify differences among natural resources (e.g., water, soil, and wood), human resources (e.g., people at work), and capital resources (e.g., machines, tools and buildings).
- Recognize that people trade for goods and services.
- Compare the use of barter and money in the exchange for goods and services (e.g., trade a toy for candy, buying candy with money).
- Recognize that some goods are made in the local community and some are made in other parts of the world.
- Discuss how people can be both producers and consumers of goods and services.
- Identify how scarcity requires people to make choices due to their unlimited wants and needs.
- Identify opportunity costs in personal decision-making situations.

- Identify goods and services (e.g., fire and police protection, immunizations, library) provided by local government.
- Give examples of trade in the local community (e.g., farmers supply the grocer).
- Discuss reasons (e.g., labor, raw materials, energy resources) why some goods are made locally and some are made in other parts of the United States and world.
- Discuss how producers use natural, human, and capital resources to create goods and services.
- Discuss different ways individuals can earn money.
- Discuss reasons for personal savings.
- Discuss costs and benefits of personal savings.
- Discuss costs and benefits of personal spending and saving choices.

October 9-20: Arizona Native Peoples

- Recognize that the development of farming allowed groups of people to settle in one place and develop into cultures/civilizations (e.g., Ancestral Puebloans (Anasazi), Hohokam, Mound builders, Aztec, Mayan)
- Recognize that settlement led to developments in farming techniques (e.g., irrigation), government, art, architecture, and communication in North America.
- Recognize that prehistoric Native American mound-building cultures lived in Central and Eastern North America
- Recognize current Native American tribes in the United States (e.g., Navajo, Cherokee, Lakota, Iroquois, Nez Perce).
- Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied
- Discuss the major economic activities and land use (e.g., natural resources, agricultural, industrial, residential, commercial, recreational) of areas studied.

October 23-27: Geology & Earth Science

Identify the basic properties of Earth materials.

Describe the following basic Earth materials:

- rocks
- soil
- water

Compare the following physical properties of basic Earth materials:

- color
- texture
- capacity to retain water

Identify common uses (e.g., construction, decoration) of basic Earth materials (i.e., rocks, water, soil).

Identify the following as being natural resources:

- air
- water
- soil
- trees
- wildlife

Identify the layers of the Earth:

- crust
- mantle
- core (inner and outer)

Describe the different types of rocks and how they are formed:

- metamorphic
- igneous
- sedimentary

Classify rocks based on the following physical properties:

- color
- texture

Describe fossils as a record of past life forms.

Describe how fossils are formed.

Identify the basic properties and uses of earth materials (rocks, soil, Water, conservation)

Identify the basic properties of earth materials (rocks, fossils, layers of the earth).

Identify ways (e.g., clothing, housing, crops) humans adapt to their environment.

Identify resources that are renewable, recyclable, and non-renewable.

Discuss geographic concepts related to current events

October 30- November 3: U.S. Government & Symbols

Identify national symbols and monuments that represent American democracy and values. Describe the history and meaning of national symbols, documents, songs, and monuments that represent American democracy and values:

- | | |
|--------------------------|----------------------|
| a. American flag | b. Bald Eagle |
| c. Statue of Liberty | d. White House |
| e. Washington Monument | a. American flag |
| b. Pledge of Allegiance | c. National Anthem |
| d. America the Beautiful | e. the U.S. Capitol |
| f. Liberty Bell | g. Ellis Island |
| h. Lincoln Memorial | i. the U. S. Capitol |

Recognize the Pledge of Allegiance and the National Anthem.

Practice examples of democracy in action (e.g., voting, making classroom rules).

Recognize how students work together to achieve common goals.

Discuss and Describe the significance of national holidays:

- a. Thanksgiving
- b. Presidents' Day
- c. Martin Luther King, Jr. Day
- d. Fourth of July
- e. Constitution Day
- f. Veterans' Day
- g. Memorial Day
- h. Labor Day

Recognize state symbols of Arizona (e.g., bird, flower, tree, flag).

Recognize that people in Arizona and the United States have varied backgrounds, but may share principles, goals, customs, and traditions.

Recognize that the U.S. Constitution provides the American people with common laws and protects their rights.

Know that people in the United States have varied backgrounds but may share principles, goals, customs and traditions.

Recognize that people in the United States have varied backgrounds but may share principles, goals, customs and traditions.

Describe how people in the community and state work together to achieve common goals.

Identify the current President of the United States and Governor of Arizona.

November 6-17: Westward Expansion

Place important life events in chronological order on a timeline.

Retell stories to describe past events, people, and places.

Use primary source materials (e.g., photos, artifacts, maps) to study people and events from the past.

Place historical events from content studied in chronological order on a timeline.

Recognize how archaeological research adds to our understanding of the past.

Use primary source materials (e.g., photos, artifacts, interviews, documents, maps) and secondary source materials (e.g., encyclopedias, biographies) to study people and events from the past.

Use timelines to identify the time sequence of historical data.

Identify reasons (e.g., economic opportunity, political or religious freedom) for immigration to the United States.

Identify reasons (e.g., economic opportunities, forced removal) why people in the United States moved westward to territories or unclaimed lands.

Discuss the experiences (e.g., leaving homeland, facing unknown challenges) of the pioneers as they journeyed west to settle new lands.

Describe how new forms of transportation and communication impacted the westward expansion of the United States:

transportation (e.g., trails, turnpikes, canals, wagon trains, steamboats, railroads)

communication (e.g., Pony Express, telegraph)

Discuss the effects (e.g., loss of land, depletion of the buffalo, establishment of reservations, government boarding schools) of Westward Expansion on Native Americans.

Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied

Discuss the major economic activities and land use (e.g., natural resources, agricultural, industrial, residential, commercial, recreational) of areas studied.

November 27- December 1 Celebrations / Eastern Religions

Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied

December 4-21: Theater & Winter Performance

No Arizona Social Studies or Science standards for this topic. Teacher may refer to Arizona's suggested Theater standards for guidance.

January 8-12: School Olympics & Health

No Arizona Social Studies or Science standards for this topic. Teacher may refer to suggested Arizona Physical Education and Health standards for guidance.

January 16-February 2: Biographies & Careers and Workplace Skills

- Discuss different ways individuals can earn money.
- Students apply critical and creative thinking skills to make decisions and solve workplace problems.
- Practice a variety of creative thinking skills to identify potential solutions to workplace issues
- Identify ways of using creative thinking skills
- Apply creative thinking skills to solve workplace issues
- Students will demonstrate a set of marketable skills that enhance career options.
- Explore areas of interests and possible work choices
- Define "areas of interest"
- Describe work choices
- Discuss how interests can relate to work choices

February 5-21: Scientific Method

- Observe, ask questions, and make predictions.
- Compare common objects using multiple senses.
- Ask questions based on experiences with objects, organisms, and events in the environment.
- Predict results of an investigation based on life, physical, and Earth and space sciences (e.g., animal life cycles, physical properties, Earth materials).
- Formulate relevant questions about the properties of objects, organisms, and events in the environment.
- Predict the results of an investigation (e.g., in animal life cycles, phases of matter, the water cycle).
- Formulate relevant questions about the properties of objects, organisms, and events of the environment using observations and prior knowledge.
- Predict the results of an investigation based on observed patterns, not random guessing.
- Participate in planning and conducting investigations, and recording data.
- *Demonstrate safe behavior and appropriate procedures (e.g., use of instruments, materials, organisms) in all science inquiry.*
- *Participate in guided investigations in life, physical, and Earth and space sciences.*
- Use simple tools such as rulers, thermometers, magnifiers, and balances to collect data (U.S. customary units).
- Record data from guided investigations in an organized and appropriate format (e.g., lab book, log, notebook, chart paper).
- Plan a simple investigation (e.g., one plant receives adequate water, one receives too much water, and one receives too little water) based on the formulated questions.
- Conduct simple investigations (e.g., related to plant life cycles, changing the pitch of a sound, properties of rocks) in life, physical, and Earth and space sciences.
- Use metric and U.S. customary units to measure objects.

- Record data in an organized and appropriate format (e.g., t-chart, table, list, written log).
- Organize and analyze data; compare to predictions.
- *Organize (e.g., compare, classify, and sequence) objects, organisms, and events according to various characteristics.*
- Compare the results of the investigation to predictions made prior to the investigation.
- Organize data using graphs (i.e., pictograph, tally chart), tables, and journals.
- Construct reasonable explanations of observations on the basis of data obtained (e.g., Based on the data, does this make sense? Could this really happen?).
- Compare the results of the investigation to predictions made prior to the investigation.
- Generate questions for possible future investigations based on the conclusions of the investigation.
- Organize data using the following methods with appropriate labels:
 - bar graphs
 - pictographs
 - tally charts
- Construct reasonable interpretations of the collected data based on formulated questions.
- Record questions for further inquiry based on the conclusions of the investigation.
- Communicate results of investigations.
- Communicate the results of an investigation using pictures, graphs, models, and/or words.
- *Communicate with other groups to describe the results of an investigation.*
- Communicate the results and conclusions of an investigation (e.g., verbal, drawn, or written).
- Communicate investigations and explanations using evidence and appropriate terminology.
- Describe an investigation in ways that enable others to repeat it.
- Identify individual and cultural contributions to scientific knowledge.

- Give examples of how diverse people (e.g., children, parents, weather reporters, cooks, healthcare workers, gardeners) use science in daily life.
- Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations
- Identify science-related career opportunities.
- Describe science-related career opportunities.
- Understand how science is a process for generating knowledge.
- Identify components of familiar systems (e.g., organs of the digestive system, bicycle).
- Identify the following characteristics of a system: consists of multiple parts or subsystems parts work interdependently
- Identify parts of a system too small to be seen (e.g., plant and animal cells).
- Describe how, in a system (e.g., terrarium, house) with many components, the components usually influence one another.
- Explain why a system may not work if a component is defective or missing.
- Understand the impact of technology.
- Identify various technologies (e.g., automobiles, radios, refrigerators) that people use.
- Describe how suitable tools (e.g., magnifiers, thermometers) help make better observations and measurements.
- Analyze how various technologies impact aspects of people's lives (e.g., entertainment, medicine, transportation, communication).
- Describe important technological contributions made by people, past and present:
 - automobile – Henry Ford
 - airplane – Wilbur and Orville Wright
 - telephone – Alexander G. Bell
- Identify a simple problem that could be solved by using a suitable tool.
- Identify ways that people use tools and techniques to solve problems.
- Describe the development of different technologies (e.g., communication, entertainment, transportation, medicine) in response to resources, needs, and values.

- Design and construct a technological solution to a common problem or need using common materials.

Energy & Magnets

Classify objects and materials by their observable properties.

Classify objects by the following observable properties:

- shape, texture, size, color, weight

Describe objects in terms of measurable properties (e.g., length, volume, weight, temperature) using scientific tools.

Investigate different forms of energy.

Demonstrate that light can be:

- reflected (with mirrors)
- refracted (with prisms)
- absorbed (by dark surfaces)

Describe how light behaves on striking objects that are:

- transparent (clear plastic)
- translucent (waxed paper)
- opaque (cardboard)

Demonstrate that vibrating objects produce sound.

Demonstrate that the pitch of a sound depends on the rate of the vibration (e.g., a long rubber band has a lower pitch than a short rubber band).

February 26-March 2: Ecology

Describe the interactions between human populations, natural hazards, and the environment.

Describe the major factors that could impact a human population (e.g., famine, drought, disease, improved transportation, medical breakthroughs).

Describe the beneficial and harmful impacts of natural events and human activities on the environment (e.g., forest fires, flooding, pesticides).

Identify the basic properties of Earth materials.

Identify common uses (e.g., construction, decoration) of basic Earth materials (i.e., rocks, water, soil).

Identify the following as being natural resources:

air water soil trees wildlife

Identify ways to conserve natural resources (e.g., reduce, reuse, recycle, find alternatives).

Describe ways humans use Earth materials (e.g., fuel, building materials, growing food).

Identify the basic properties and uses of earth materials (rocks, soil, Water, conservation)

Describe major factors that impact human populations and the environment.

Identify ways (e.g., clothing, housing, crops) humans adapt to their environment.

Identify resources that are renewable, recyclable, and non-renewable.

Identify ways (e.g., agriculture, structures, roads farming, building structures and dams, creating transportation routes, overgrazing, mining, logging) in which humans depend upon, adapt to, and impact the earth.

Recognize & Describe ways of protecting natural resources.

Use geography concepts and skills (e.g., recognizing patterns, mapping, graphing) to find solutions for local, state or national problems (e.g., trash, leaky faucets, bike paths, traffic patterns shortage or abundance of natural resources) in the local environment.

Discuss geographic concepts related to current events

March 5- 16: Celebrating Diversity / Civil War & Reconstruction

Place important life events in chronological order on a timeline.

Retell stories to describe past events, people, and places.

Use primary source materials (e.g., photos, artifacts, maps) to study people and events from the past.

Place historical events from content studied in chronological order on a timeline.

Use primary source materials (e.g., photos, artifacts, interviews, documents, maps) and secondary source materials (e.g., encyclopedias, biographies) to study people and events from the past.

Use timelines to identify the time sequence of historical data

Recognize that there were issues (e.g., slavery, states' rights, South seceded from the Union) associated with the Civil War.

Discuss contributions of people (e.g., Abraham Lincoln, Jefferson Davis, Robert E. Lee, Ulysses S. Grant, Harriet Tubman, Sojourner Truth, Frederick Douglass) during the Civil War era.

Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied

Discuss the major economic activities and land use (e.g., natural resources, agricultural, industrial, residential, commercial, recreational) of areas studied.

March 19-23

Ocean- See Ecosystem Standards in Fall

March 26-28

Free

April 3-20: Movies and Media

SEE TECHNOLOGY STANDARDS

No Arizona Social Studies or Science standards for this topic.

Teacher may refer to suggested Arizona Technology and Media Arts standards for guidance.

April 23- May 4: Asian Culture / Ancient India

Recognize that civilizations developed in China, India, and Japan.

Recognize how art (e.g., porcelain, poetry), architecture (e.g., pagodas, temples), and inventions (e.g., paper, fireworks) in Asia contributed to the development of their own and later civilizations.

Describe how expanding trade (e.g., Marco Polo's travels to Asia) led to the exchange of new goods (i.e., spices, silk) and ideas.

Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied

Discuss that Asian civilizations have changed from past to present.

Discuss that Ancient Civilizations have changed from past to present.

May 7-11: Creepy Crawlies

Understand that basic structures in plants and animals serve a function.

Identify the following as characteristics of living things:

- growth and development
- reproduction
- response to stimulus

Compare the following observable features of living things:

- movement – legs, wings
- protection – skin, feathers, tree bark
- respiration – lungs, gills
- support – plant stems, tree trunks

Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Identify animal structures that serve different functions (e.g., sensory, defense, locomotion).

Understand the life cycles of plants and animals.

Identify similarities and differences between animals and their parents.

Describe the life cycles of various insects.

Compare the life cycles of various organisms.

Understand the relationships among various organisms and their environment.

Identify some plants and animals that exist in the local environment.

Compare the habitats (e.g., desert, forest, prairie, water, underground) in which plants and animals live.

Describe how plants and animals within a habitat are dependent on each other.

Examine an ecosystem to identify microscopic and macroscopic organisms.

Describe how plants and animals cause change in their environment.

Describe how environmental factors (e.g., soil composition, range of temperature, quantity and quality of light or water) in the ecosystem may affect a member organism's ability to grow, reproduce, and thrive.

Identify plant and animal adaptations.

Identify adaptations of plants and animals that allow them to live in specific environments.

Describe ways that species adapt when introduced into new environments.
Cite examples of how a species' inability to adapt to changing conditions in the ecosystem led to the extinction of that species

May 14-25: Ancient Egypt

Place important life events in chronological order on a timeline.

Retell stories to describe past events, people, and places.

Use primary source materials (e.g., photos, artifacts, maps interviews, documents) and secondary source materials (e.g., encyclopedias, biographies) to study people and events from the past.

Place historical events from content studied in chronological order on a timeline.

Recognize how archaeological research adds to our understanding of the past.

Use timelines to identify the time sequence of historical data.

Recognize that the development of farming allowed groups of people to settle in one place and develop into civilizations (e.g., Egypt).

Recognize that settlement led to the development of farming techniques (e.g., Nile River flooding), government (e.g., pharaohs), art/ architecture (e.g., pyramids), and writing (e.g., hieroglyphics) which contributed to the advancement of the Ancient Egyptian civilization.

Recognize that civilizations in the Americas had similar characteristics to the Egyptians.

Discuss elements of cultural (e.g., food, clothing, housing, sports, holidays) of a community in areas studied

Discuss the major economic activities and land use (e.g., natural resources, agricultural, industrial, residential, commercial, recreational) of areas studied.

Discuss that Ancient Civilizations have changed from past to present.