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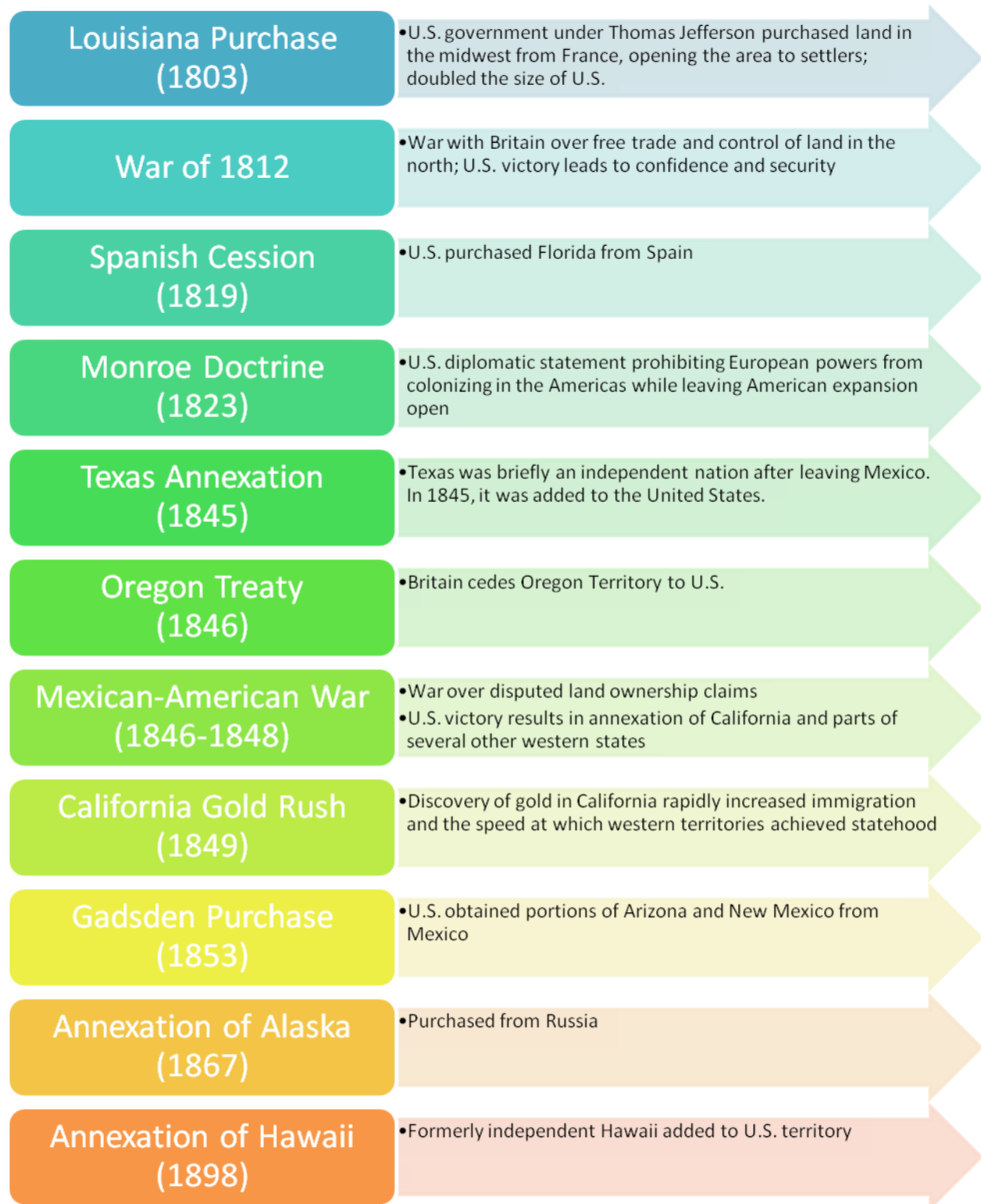
MTEL®
General Curriculum
Multi-Subject Subtest And
Mathematics Subtest
“Comprehensive Success System”

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expanding into the new territories eventually led to the secession controversy and Civil War.



The Civil War and Its Aftermath

A Nation Divided

In the first half of the 19th century, the nation found itself increasingly divided into North and South. **Sectionalism** is focusing more on the interest of one's own region than on that of the whole nation. There were two major issues dividing North from South:



Slavery as an institution existed well before the Civil War. Slave labor was important to make the labor-intensive cultivation of cash crops like indigo, sugar, tobacco, and rice profitable in the South. The invention of the cotton gin made equally labor-intensive cotton production lucrative and entrenched slavery in the economy of the southern states.

The industrialized North, however, did not use slave labor. Regional economic differences furthered sectionalism in Congress. A growing anti-slavery moment known as the **abolition movement** flourished in the North and pressured the government to enact change. Abolitionists were from diverse races, genders, and ages. The chart on the following page shows just a few of the prominent abolitionists who helped to drive the anti-slavery movement.



Linked to the conflict over slavery was a fight over where slavery would be allowed. Existing northern states prohibited slavery and existing southern states allowed it, but what about the new western territories and the states that would eventually form there? New states would bring new representatives to Congress, and neither the pro-slavery side nor the anti-slavery side was willing to be outnumbered. This led to a series of measures designed to maintain a delicate balance between free and slave states. This included:

Missouri Compromise (1820)	Missouri was admitted as a slave state and Maine as a free state; the rest of the Louisiana territory was divided into a free north and a slaveholding south along the 36° 30' parallel
Compromise of 1850	California admitted as a free state; slavery permitted in New Mexico Territory; enacted a stricter fugitive slave law
Kansas and Nebraska Act (1854)	Popular sovereignty (voting) would decide whether or not slavery would be allowed in those territories; led to a land rush
<i>Dred Scott v. Sandford</i> (1857)	Supreme Court decision that essentially nullified the Missouri Compromise by stating that African-Americans were not citizens, slaves were property, and slavery could not be prohibited in the territories

The conflict over slavery unearthed a deeper constitutional issue of states' rights. At the heart of the issue was whether the federal government or states had ultimate power. Two doctrines, nullification and secession, were advocated by Southern leaders favoring states' rights.

Nullification: The federal government exists only at the will of the states; states can nullify unfavorable federal laws within their borders	Secession: Minority regional interests must be protected against a hostile majority, to the point of leaving the union of states
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Abraham Lincoln, a Republican candidate who personally favored abolition but was committed to preserving the union with or without slavery, was elected in 1860 without winning any southern states. His election accelerated the secession movement. South Carolina was the first to leave the Union in 1860. Ten other states followed suit and banded together to form the ***Confederate States of America***. The Civil War soon began in an effort to preserve the Union.

The Civil War

The Civil War began in 1861 when Confederate forces in recently seceded South Carolina fired upon federal troops at Ft. Sumter. The North, fighting to preserve the Union (abolition only became an issue for the North after the Emancipation Proclamation was issued in 1863), far outweighed the South in military advantages.



Strengths of the North:

- Advanced communication and transportation lines
- Industrialized economy
- Control of the U.S. Navy
- Significantly higher population



Weaknesses of the North:

- Faced a much more difficult task of invading, subduing, and controlling territory

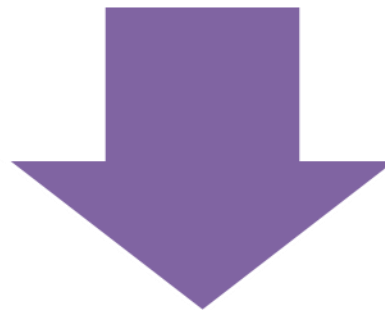
Strengths of the South:

- Faced a simpler objective of maintaining control of home territory; motivated to defend homes and way of life
- Rich agricultural resources
- Highly trained military officers

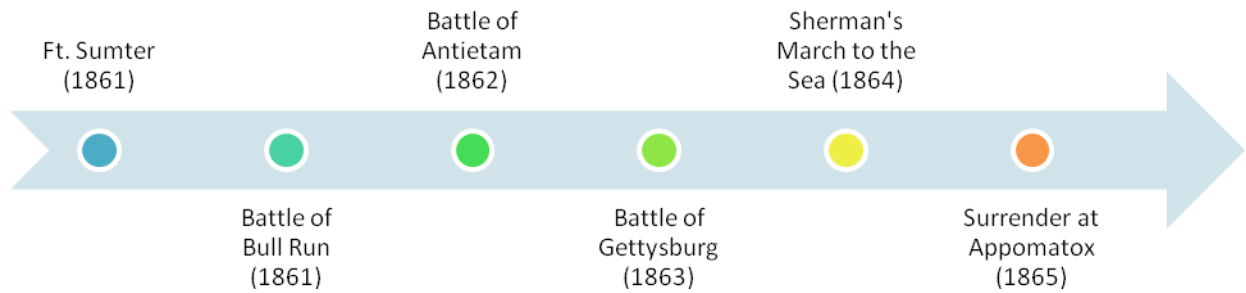


Weaknesses of the South:

- Little to no gunpowder or munitions works
- Significantly lower population
- Underdeveloped transportation and communication lines
- Unestablished central government



The Civil War (1861-1865) was the bloodiest in American history. The following timeline shows some of its major battles, ending in Union victory.



Reconstruction

After the Confederate surrender on April 9, 1865, the federal government faced significant challenges mending relations between North and South. Congress needed to uphold abolition and rebuild the southern economy without exacerbating sectionalism. The efforts to do so were known as the **Reconstruction**. Under Presidents Lincoln and Johnson, Congress passed laws to:

- Abolish slavery nationwide with the 13th Amendment
- Reinstate southern landowners and officials who swore loyalty to the Union
- Create a plan for the South to pay off war debt
- Give all African-Americans citizenship (14th Amendment) and prevent voting discrimination based on race (15th Amendment)

Reconstruction did not succeed in establishing equal race relations. Entrenched racism and backlash against Congress's actions led southern states to enact **Jim Crow laws** (racial segregation), poll taxes, and literacy tests for voting eligibility. Equality under the law and in action was not achieved until the Civil Rights Movement nearly a century later.

Industrialization and the Rise of Big Business

The Civil War was in large part the product of regional economic differences between the industrialized North and agricultural South. After the war, industrialization spread into the South. The onset of the **Industrial Revolution** in America was the product of the nation's rich natural resources including water power, timber, and iron ore combined with population growth, innovative production systems, and technology.

The **factory system**, centralizing production in one main location, replaced the labor and time-intensive cottage system. Railroads and telegraphs drastically reduced the time and expense of shipping and communication across the nation. Mechanization introduced the use of machinery into production, replacing slower and less predictable hand-tool methods. The development of interchangeable parts, where the components of a good are made identical and easily replaceable, also increased speed and lowered cost of production. Later innovations continued to increase American manufacturing power and economic growth. Henry Ford's moving assembly line for the Model T automobile revolutionized worldwide manufacturing. The moving assembly line used interchangeable parts and worker specialization to decrease overall production time and cost, increasing profit.

Positive Effects of Industrialization	Negative Effects of Industrialization
Greater opportunities for employment	Rapid urban growth creates sanitary and safety issues
Greater availability of products at lower prices	Poor working conditions and low wages
Immigration brings greater cultural diversity and new ideas	Influence of business on government policy leads to corruption
Reform movements improve working and living conditions	Increased discrimination against immigrants

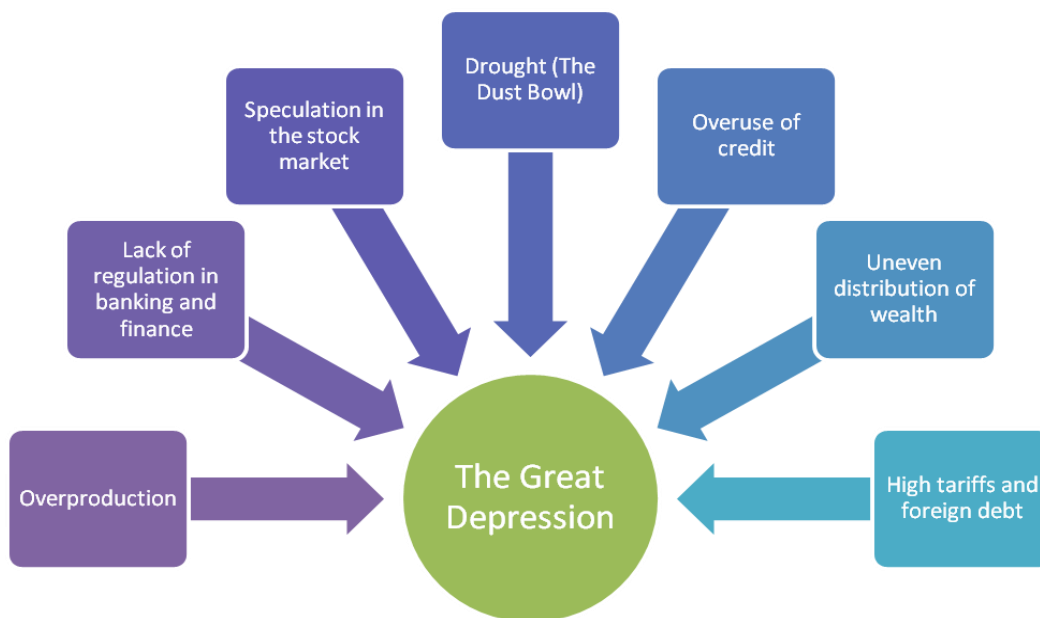
20th Century Developments

Wars and Depression

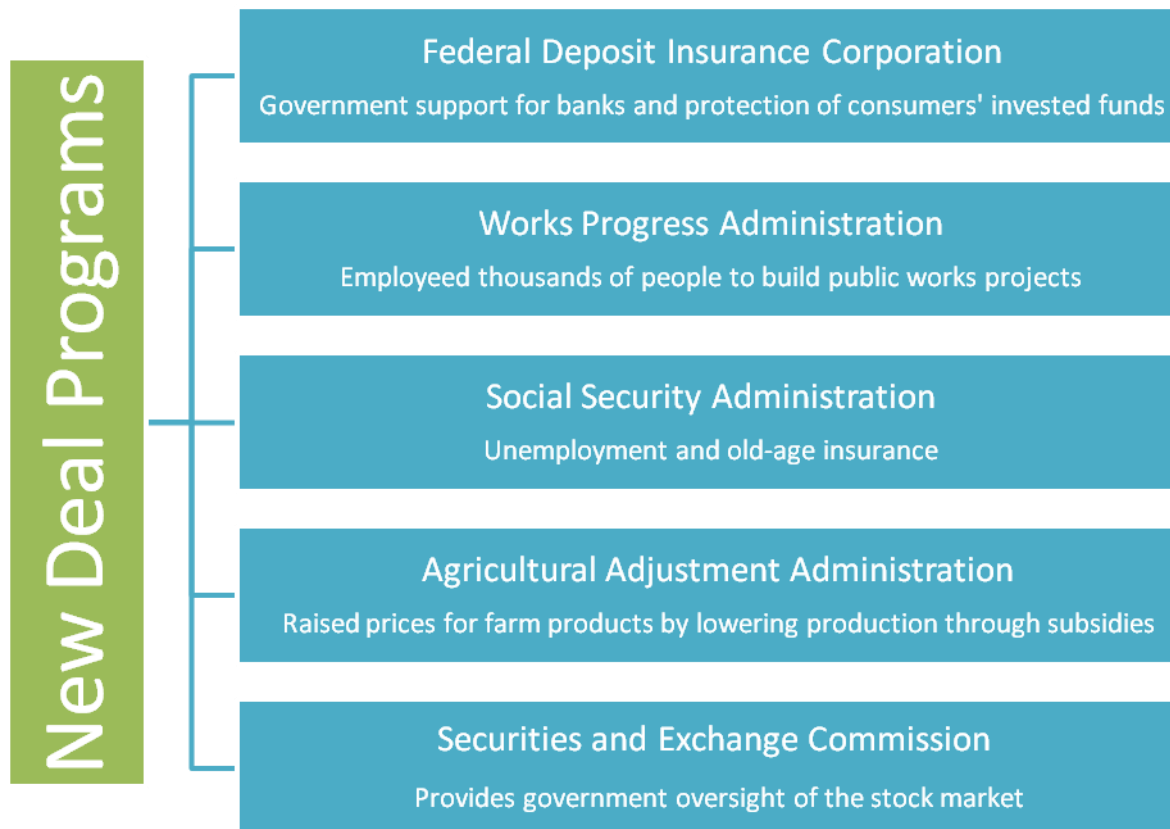
From 1917-1918, the United States was embroiled in global conflict as a major combatant in **World War I**. (See “World History” for more on World War I.) Following the war, the United States sought a return to isolationist foreign policy, hoping to avoid future wars.

A positive effect of the war was economic prosperity for the United States. Unlike Europe, whose land and industries were ravaged by war, the United States found post-war economic success. With the economies of many European countries struggling, the United States was able to increase its exports. The country experienced a period of prosperity in the 1920s known as the **Roaring Twenties**.

This success would be short-lived, however. By the end of the decade, the nation, along with much of the rest of the world, found itself in the depths of the **Great Depression**. The chart below shows some of the major causes of the depression.



President Franklin Roosevelt spearheaded legislation known as the **New Deal** aimed at creating jobs and injecting government funds into the failing economy.



The New Deal was controversial, blamed for increasing public dependence on government and increasing federal power beyond constitutional limits. It did succeed in providing a level of security for individuals through the new welfare system. True economic recovery, however, was only reached with the start of World War II and the sudden demand for soldiers and manufacturing.

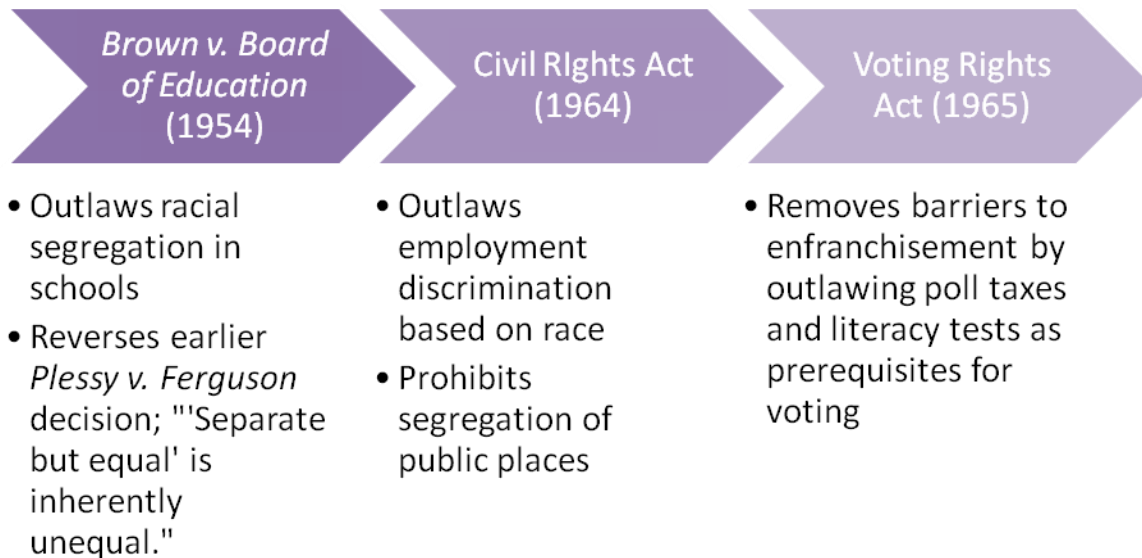
The United States tried to maintain isolationism and stay out of **World War II** (1939-1945), but it was thrust into the conflict in 1941 when the Japanese bombed a U.S. naval base in Pearl Harbor, Hawaii. The United States became an important player in the war and helped bring the Allies to victory. (See “World History” for more on World War II.)

Post-War America

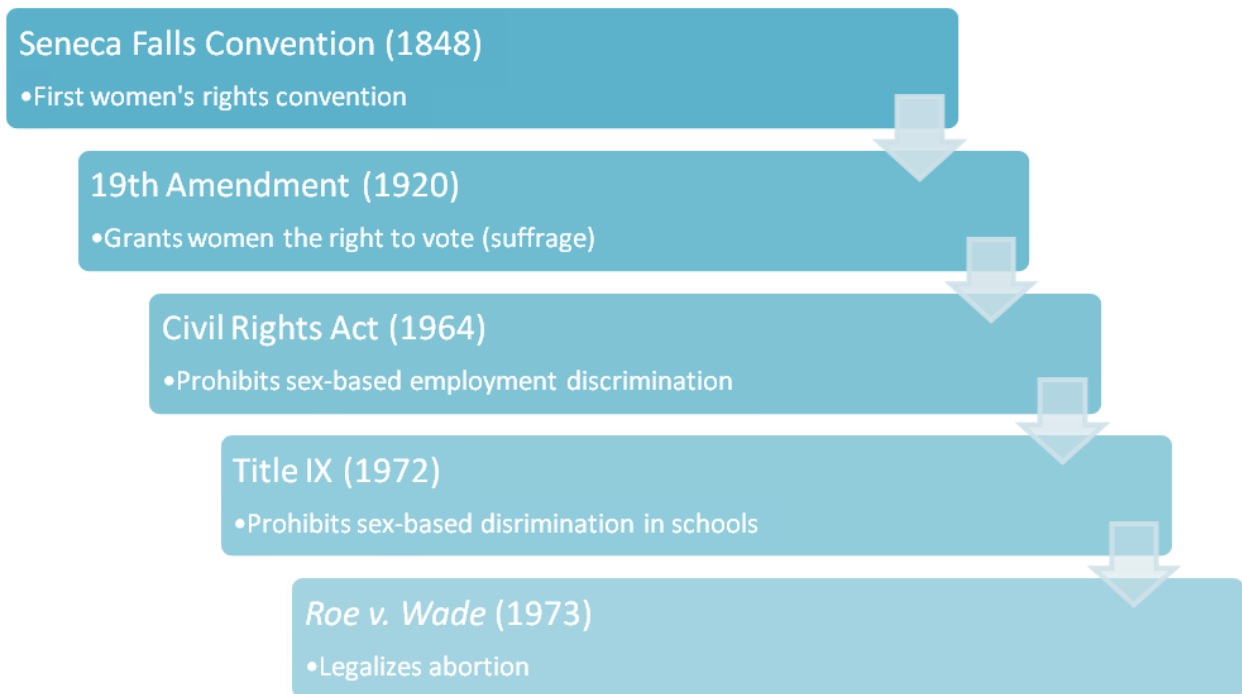
After World War II, the United States spent much of the rest of the 20th century engaged in the **Cold War**—a rivalry with the Soviet Union. This led to an arms race, the Space Race, and wars in Korea and Vietnam. (See “World History” for more on the Cold War.) Since the end of the Cold War in 1991, the United States’ most significant international conflicts have been the Persian Gulf War, the War in Afghanistan, and the Iraq War.

At home, the 20th century has seen numerous large-scale social movements, chiefly aimed at increasing civil rights for various groups. The two largest of these movements were the Civil Rights Movement and the Women’s Rights Movement.

The **Civil Rights Movement** focused on gaining equal rights for African Americans. Some of the major goals included desegregation, equal treatment under the law, and the ability to freely exercise the right to vote. Some of the major leaders of the Civil Rights Movement were Martin Luther King, Jr., Rosa Parks, and Malcolm X.



The **Women's Rights Movement** has been a long fight for equality for women. In the early 20th century, women were focused on gaining the right to vote. Once that right was obtained, concerns shifted to equal opportunities, equal pay, and reproductive rights. Some of the major leaders in the quest for women's rights have included Sojourner Truth, Susan B. Anthony, Elizabeth Cady Stanton, Betty Frieden, Alice Paul, and Gloria Steinem.

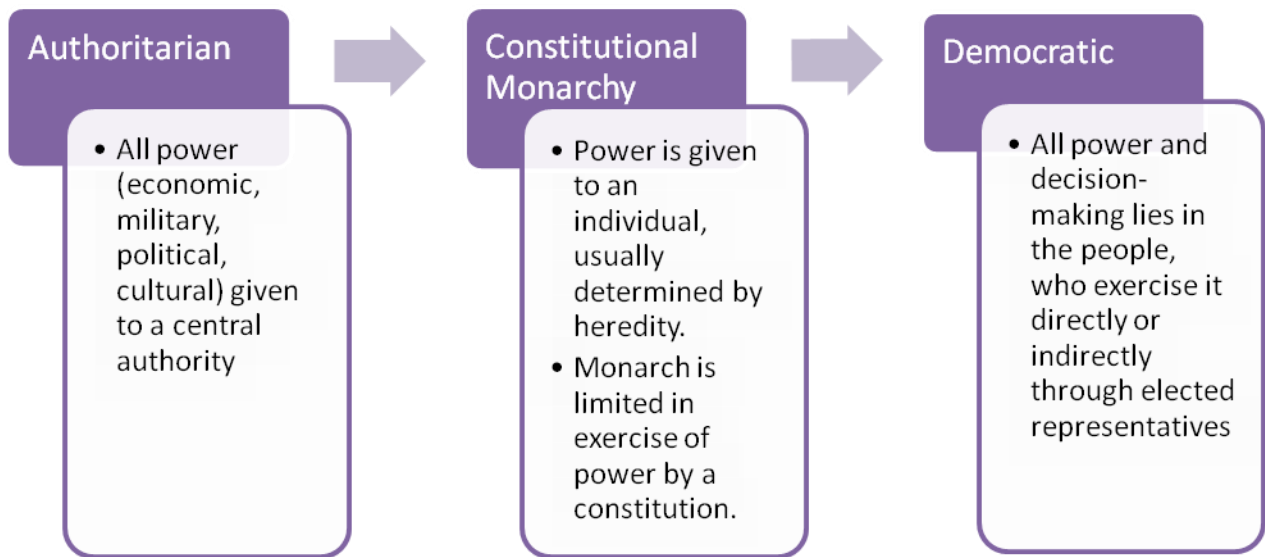


In addition to social movements, 20th century America focused on technological advancement, economic development, and maintaining its position of power on the world stage. **Globalization** has been an increasingly significant force as the world becomes more interconnected. The United States has participated in this through communications, international economic agreements (e.g., NAFTA), and coordinated foreign policy efforts (e.g., the United Nations).

Government, Citizenship, and Democracy

Forms of Government

Governments exist to organize society and protect individuals from conflict. The form of government depends on who is given what extent of power and authority in a society. Different forms of government provide different levels of control and individual involvement in ruling. The following graphic organizes basic forms of government by level of popular control.



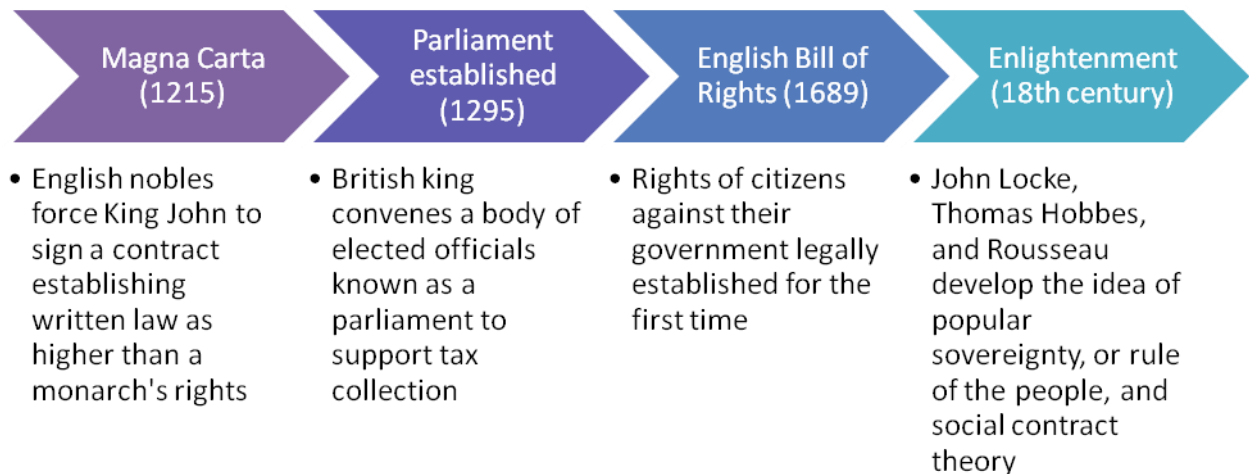
Authoritarian governments range from totalitarian dictatorships, where the government controls every aspect of life, to absolute monarchies, where a monarch exerts political and economic power. The United Kingdom is an example of a modern nation with a constitutional monarchy. The queen's power is limited by Britain's constitution and she shares power with the legislature and its leader, the prime minister. The United States is an example of a nation with a democratic system. (The U.S. government is explored in depth in the next section.)

The Government of the United States

Foundations of the American System

The United States has developed with a democratic style of limited government, where the power of government to infringe on the rights of individuals is restricted by law. The specific form of democracy in the U.S. is republicanism. **Republicanism** is a system in which the people hold the power but are not directly involved in legislation (as in a direct democracy). Officials are elected to represent and enact the will of the people in the government.

The republican form of government has roots as far back as the Republic of Rome. Development of representative democracy started to coalesce into its modern form with the Magna Carta of 1215.



TEST TIP

- The Enlightenment thinker most likely to show up on the exam is John Locke. His theory of natural rights heavily influenced Thomas Jefferson as he wrote the Declaration of Independence.

Principles of the U.S. Constitution

The U.S. Constitution is based on several key principles:

Principle	Definition	Role in the Constitution
Popular Sovereignty	Rule by the people	People are given the right to vote for their leaders and to petition the government.
Federalism	Power is divided between national and state governments	<i>Delegated powers</i> - federal government only <i>Reserved powers</i> - states only <i>Concurrent powers</i> - shared
Separation of Powers	No one person or body should hold all the power—power must be divided to prevent corruption	The federal government is divided into three branches (legislative, executive, and judicial).
Checks and Balances	The branches of government should limit one another's power	Each branch has specific ways of checking the power of the other two.
Individual Rights	People have natural rights that the government is expected to protect	The Bill of Rights and other amendments protect rights.
Flexibility	The Constitution should be able to adapt to changing needs	The amendment process allows changes to the Constitution; the “elastic clause” grants legislative flexibility

The Branches of the Federal Government

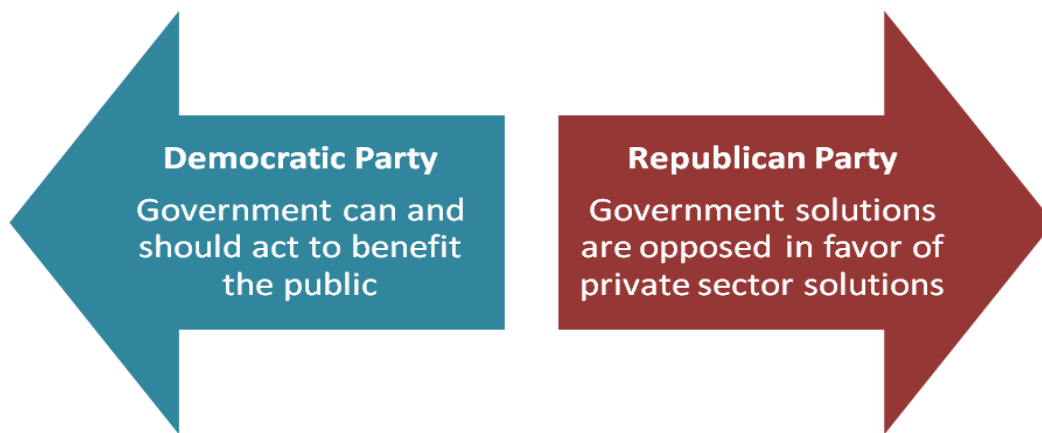
The federal government's power was purposefully separated between the executive, legislative, and judicial branches. Each of these branches has a specific role. Each also performs **checks and balances** to limit the power of the other two branches.

	Executive Branch	Legislative Branch	Judicial Branch
Main Members	President	Congress, made up of Senate and House of Representatives	Supreme Court
Role	Enforces the law	Makes the law	Interprets the law
Important Powers	Head of state and head of government; signs bills into law; Commander-in-Chief of armed forces; directs foreign policy	Makes laws; makes official declaration of war; ratifies treaties	Interpreting the Constitution; judicial review (determining the constitutionality of laws- power granted in <i>Marbury v. Madison</i>); highest court of appeals
Method of Selection	Elected every 4 years (max. of 2 terms); popular vote influences final vote by Electoral College	Senate: 2 senators from each state elected every 6 years House: elected every 2 years; # of representatives for each state based on population	Appointed by the president (subject to Senate approval); serve for life
Checks on the Executive Branch		Can impeach and remove president for crimes; can override presidential veto with $\frac{2}{3}$ vote of both houses	Can declare presidential actions unconstitutional
Checks on the Legislative Branch	Can choose to sign or veto bills		Can strike down laws as unconstitutional
Checks on the Judicial Branch	Appoints justices	Approves judicial nominees; can impeach justices	

Political Parties in the United States

Although the founding politicians of the United States were wary of political parties (George Washington called parties “potent engines by which cunning, ambitious, and unprincipled men will be enabled to subvert the power of the people...”), regionalism after the Revolutionary War led to their early development. The first two parties—the Federalists and the Democratic-Republicans—formed.

Today, the two main political parties in the United States are the Republicans and the Democrats. The essential difference between the parties, though worked out differently across the issues, is:

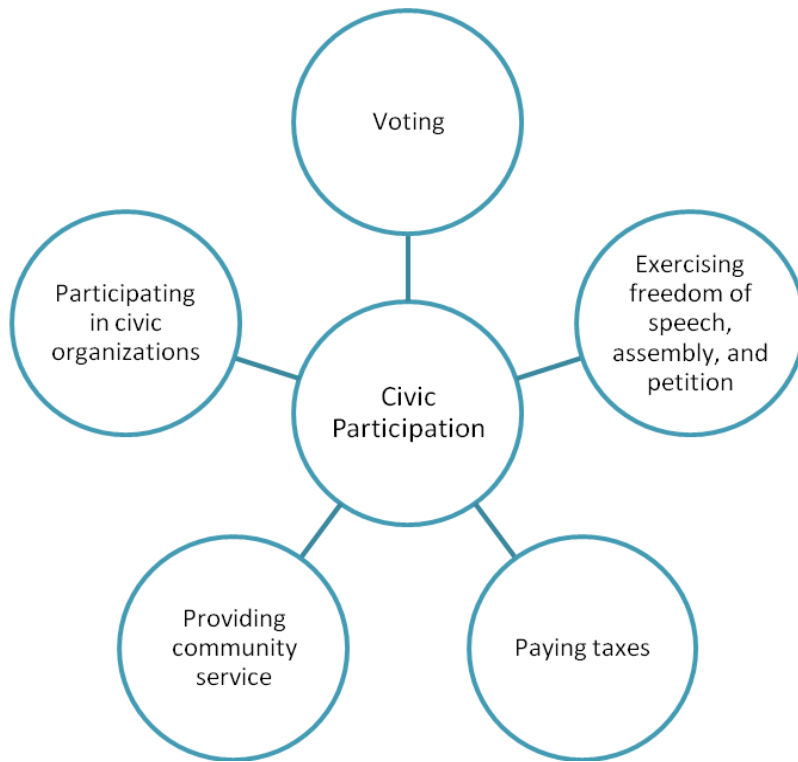


The role of parties today is to find and present candidates for election, help run the campaigns, and create alliances within the government of politicians of similar beliefs.

Civic Participation

Today, as throughout our nation's history, the burden of preserving liberty lies not with the government but with individuals. It is essential for the government to be supported by active, informed, and involved citizens.

Civic participation takes many forms:



All civic participation, regardless of form, has the effect of maintaining a balance of power between the government and the people. The more involved its citizenry, the less likely and less able a government is to infringe upon their rights of “life, liberty, and the pursuit of happiness.”

Earth and Space Science

Physical and Historical Geology

Earth's Structure

The Earth is made up of four main layers:

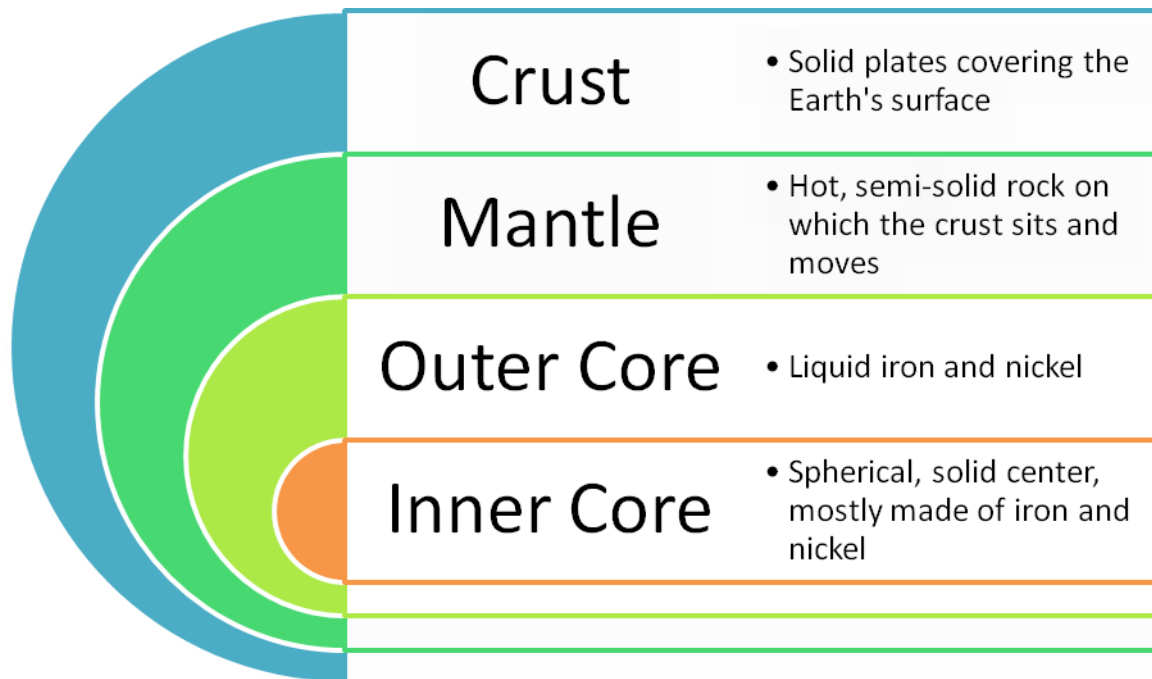


Plate Tectonics

The Earth's crust is made up of several large pieces known as **tectonic plates**. Everything on the Earth's surface—landforms, water, all life forms—exists on top of these plates.

Since the crust sits on top of the mantle, which is only semi-solid, the crust slowly shifts around. These plates interact with one another along boundaries called **fault lines**. There are three types of plate boundaries, each of which affects the surface of the Earth:

Type of Boundary	Description	Result
Convergent	Plate move toward each other and collide	Formation of mountains, ridges, and volcanoes
Divergent	Plates move away from each other and separate	Forms valleys; opens up the ocean floor to create new crust
Transform	Plates slide next to each other and rub one another	Earthquakes

**TEST TIP**

- You should be able to identify the type of boundary and its possible effects from a diagram. Arrows are used to show the direction of plate movement.

Rocks and Minerals

The Earth's crust is composed of various forms of rock. There are three main types of rocks:

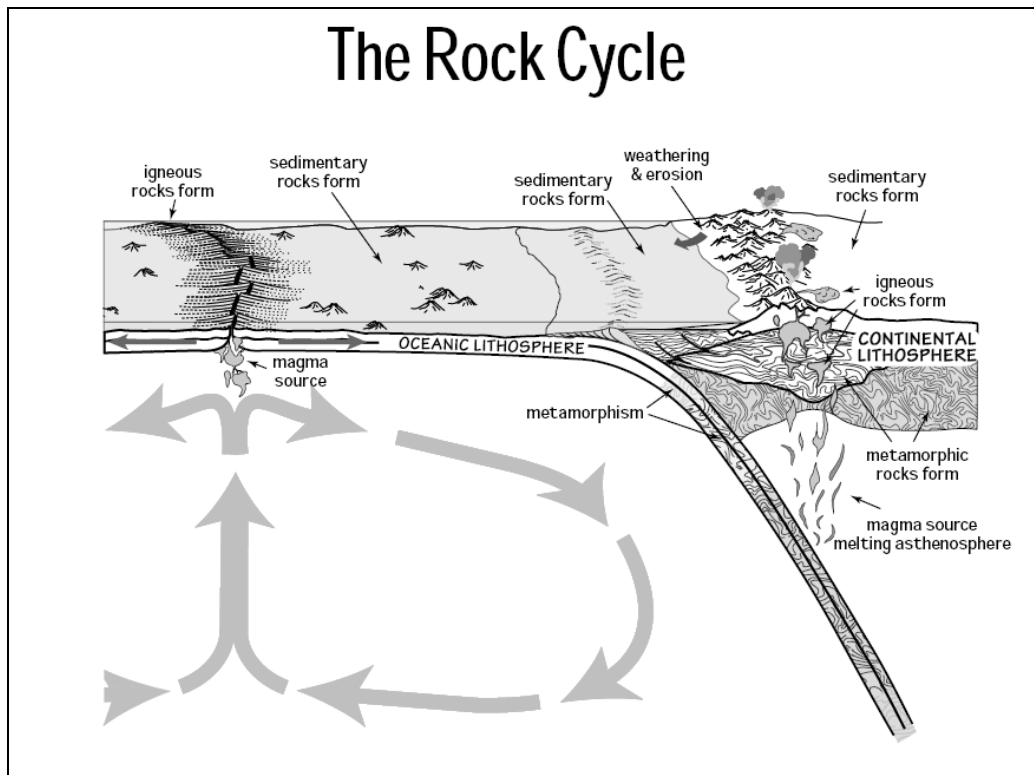
Type of Rock	How It Forms	Example
Igneous	Magma cools and hardens	Granite
Sedimentary	Bits of sediment (small rocks, sand, fossils, shells, etc.) are compressed into layered rock over time	Sandstone
Metamorphic	Any type of rock morphs due to heat and pressure to create a new rock	Marble

In addition to heat and pressure, rocks can also change due to forces of weathering and erosion, which break down rocks over time.

Weathering occurs when rock breaks down due to environmental forces such as the weather. **Erosion** occurs when broken-down rock is carried away by wind or water. One result of erosion is the formation of soil. **Soil** is the material that covers much of Earth's land and allows

plants to grow. Soil is made up of weathered rock, minerals, and organic materials (e.g., decomposed plants and animals).

The **rock cycle** describes the process rocks go through as they are formed, changed, and destroyed.

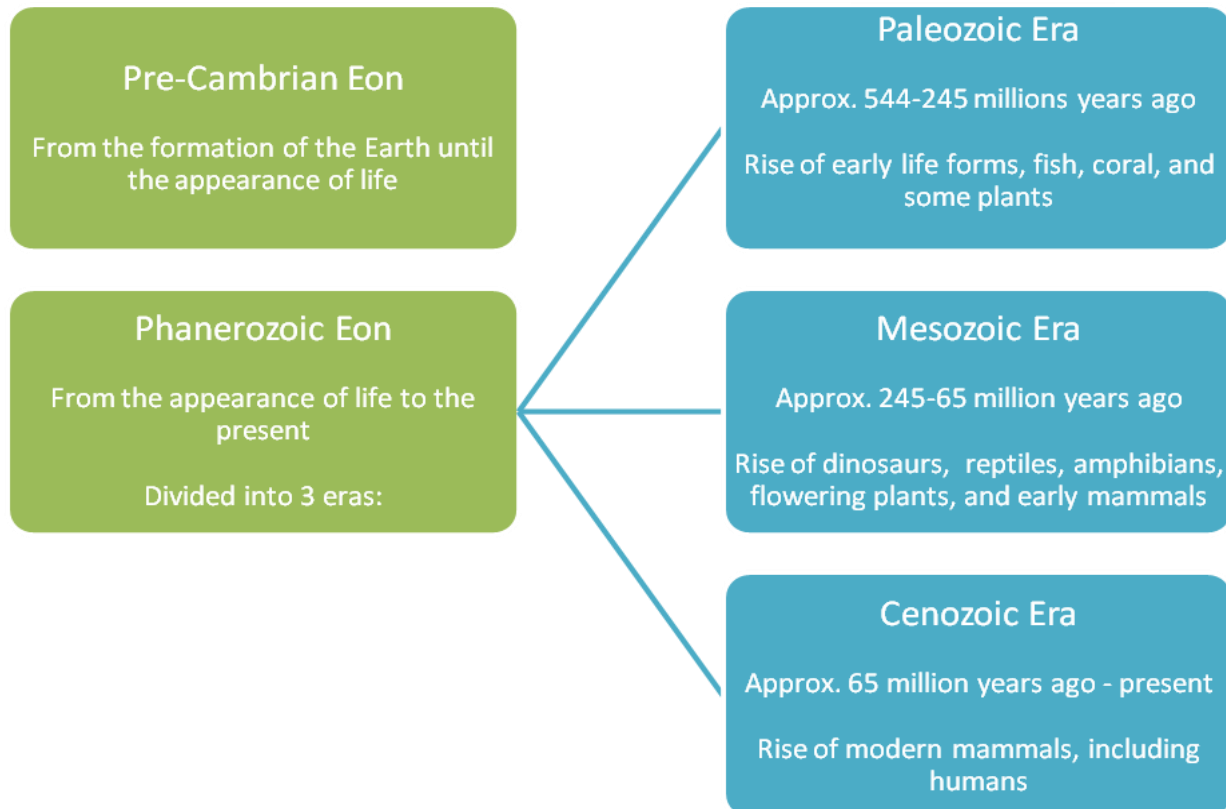


Minerals are naturally-occurring, homogenous, inorganic (non-living) solids found within the Earth that are characterized by their crystalline structure, color, and hardness. Examples of minerals include:

- Amethysts
- Diamonds
- Emeralds
- Gold
- Silver
- Gypsum
- Quartz
- Talc

Earth's Geologic History

Geologic history refers to the physical changes the Earth has gone through since it was first formed. The Earth is estimated to be between 4 and 5 billion years old. During this time, the Earth has undergone dramatic changes. The chart below shows the major time periods in Earth's geologic history.



The Earth's history is studied by looking at rock layers known as the **geologic record**. The study of these rock layers is based on the **law of superposition**—the idea that the deepest layers of rock formed first and newer layers formed on top. This helps scientists to date findings within the rock layers.

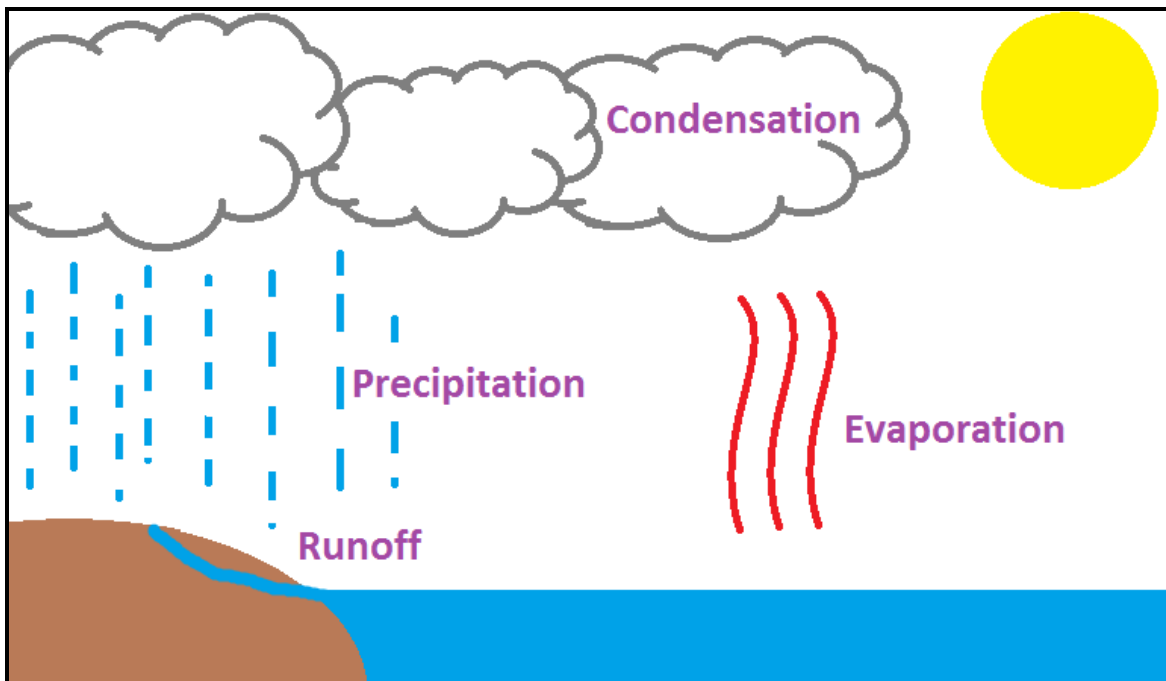
Earth's Hydrosphere and Atmosphere

Earth's Hydrosphere

Most of the Earth's surface is covered by water. This includes bodies such as oceans, gulfs, bays, lakes, rivers, and streams, as well as ice caps and glaciers. (For definitions of the different types of bodies of water, see "Geography" in the "Social Studies" section.)

The **water cycle** is the process by which water moves from the Earth's surface into the atmosphere and back again.

- **Evaporation**—liquid water on the Earth's surface is warmed and becomes water vapor
- **Condensation**—water cools and turns into cloud droplets
- **Precipitation**—liquid water falls from clouds in the form of rain, snow, sleet, or hail
- **Runoff**—precipitation that lands on the ground flows to join a larger body of water



Evaporated water in the atmosphere condenses to form clouds. There are four major types of clouds:

Cloud Type	Description
Cirrus	Wispy clouds that form at high altitudes; contain ice
Cumulus	Fluffy, white clouds that form when warm, moist air is forced upwards
Nimbus	Clouds that produce precipitation
Stratus	Low-level clouds in horizontal layers; form when warm, moist air passes over cool air

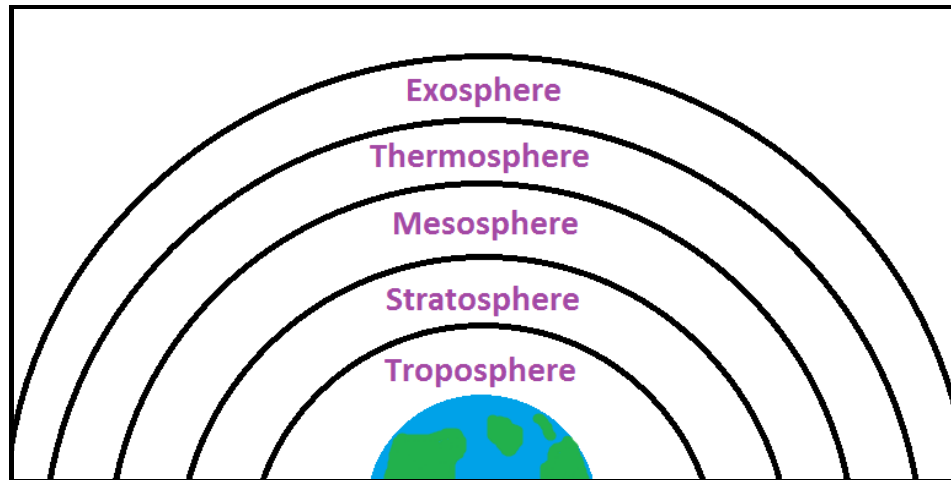
Earth's Atmosphere

Earth's atmosphere has several important functions, including:

- Absorbing energy from the sun
- Insulating the Earth, keeping it warm while also protecting it from the sun's direct rays
- Recycling water and gases needed to sustain life
- Maintaining the climate

Just like the Earth itself, Earth's atmosphere is made up of layers:

1. **Troposphere:** where life exists and where weather occurs
2. **Stratosphere:** location of the ozone layer; absorbs ultraviolet radiation
3. **Mesosphere:** coldest layer of the atmosphere; where meteors entering the atmosphere burn up and become shooting stars
4. **Thermosphere:** hottest and least dense layer of the atmosphere
5. **Exosphere:** outermost layer; where satellites orbit



Climate and Weather

A **climate** is the long-term prevailing weather pattern of an area. Earth's diverse climates are classified into five major categories:

- Polar—very cold with permanently frozen ground
- Temperate—warm, wet summers and cool, dry winters
- Continental—fairly low precipitation and wide temperature variation
- Tropical—hot and wet throughout the year
- Dry—very little precipitation; wide difference between daytime and nighttime temperatures

Weather is the short-term state of the atmosphere at any given time. Weather encompasses such factors as temperature, humidity, and precipitation.

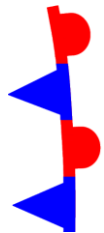
- **Temperature**—a measure of heat
- **Humidity**—the level of moisture in the air (expressed as a percentage)
- **Precipitation**—water falling from the sky in the form of rain, snow, sleet, or hail

An **air mass** is a body of air with a uniform temperature, humidity, and pressure. Air masses play an important role in the weather. The boundary between two different air masses is called a **front**.



A **cold front** occurs when a cold, dry air mass pushes under a warm, moist air mass, causing it to rise. These fronts cause the temperature in the area to drop. Because cold fronts move very quickly, they can result in severe weather, such as strong winds, thunderstorms, or heavy snow.

A **warm front** occurs when a warm air mass moves into an area and overtakes a cold air mass. It often results in fog, humidity, or light rain.



A **stationary front** occurs when a warm and cool air mass meet but neither is strong enough to overtake the other. They can remain in this “stand-off” for several days.

An **occluded front** occurs when a warm air mass gets between two cool air masses. This may result in cooler temperatures, clouds, rain, or snow.



TEST TIP

- The symbols next to each type of front are used to identify them on weather maps. The symbols point in the direction that the moving air mass is advancing. You should be able to recognize these symbols.

Astronomy

The Universe

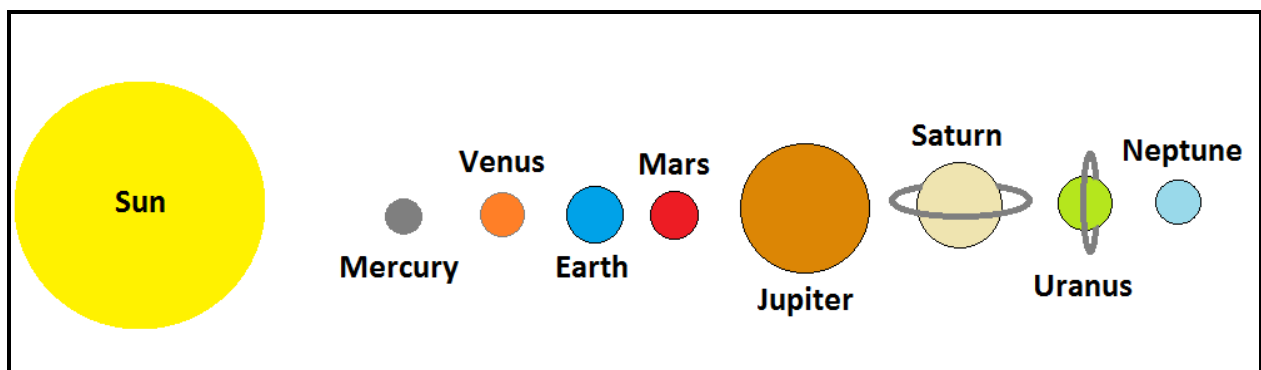
The Earth is just one small body within a vast universe. The universe, thought to be about 20 billion years old, contains countless other bodies and systems.

Galaxies are systems of stars. We live in a galaxy called the Milky Way. Within each galaxies are many different celestial objects, including stars, planets, moons, asteroids, meteoroids, and comets.

Many stars have groups of planets and other bodies in a gravitational system around them. These are known as **solar systems**.

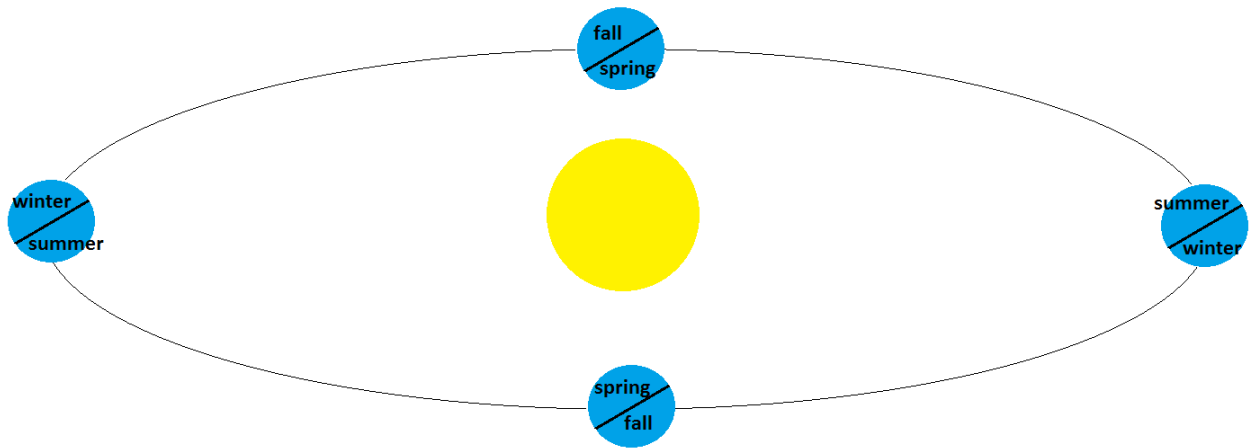
Our Solar System

Our solar system is centered on one star, known as the sun. Around the sun, eight planets revolve in elliptical orbits, held in place by the sun's gravitational pull. One trip around the sun is known as a **revolution**. On Earth, one revolution takes one year.



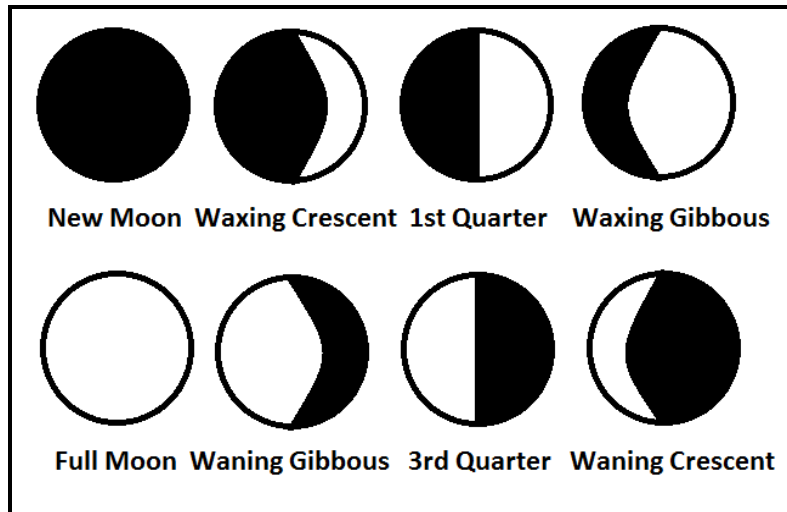
In addition to moving around the sun, Earth also spins on its axis. This is called **rotation**. On Earth, one complete rotation takes one day. The Earth's axis is tilted, which means that the Earth faces the sun at an

angle. The **tilt** of the Earth affects the seasons. When a hemisphere (Northern or Southern) is tilted toward the sun, it experiences summer. When a hemisphere is tilted away from the sun, it experiences winter. This is why the two hemispheres experience their seasons at opposite times of year.

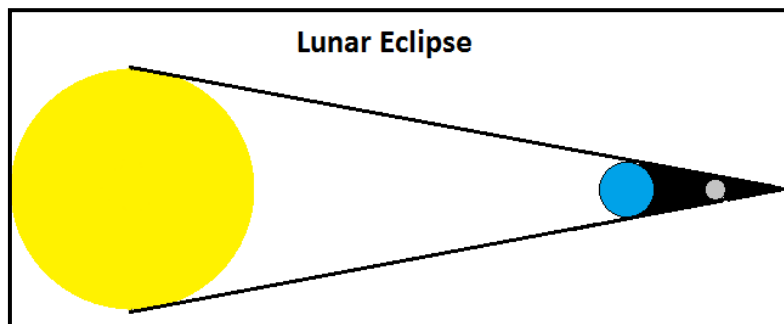


Many of these planets have smaller bodies revolving around them called **moons**. Some planets have many moons; others have none. Earth has one moon, known as the Moon.

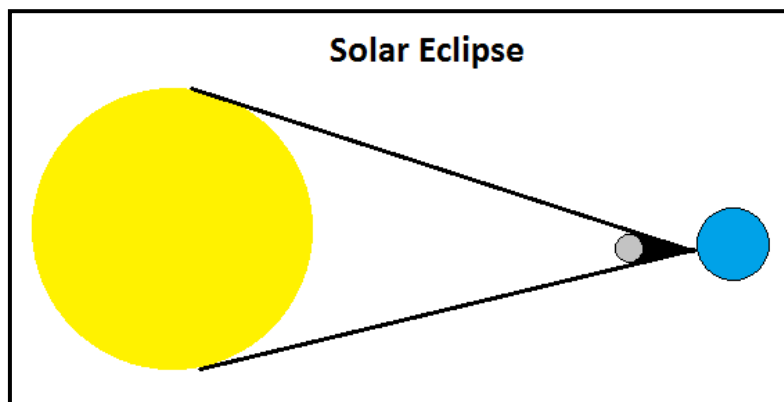
The Moon emits no light of its own, but reflects the light of the sun. When we see the Moon lit up in the night sky, we are seeing the sun's light bounce off of the Moon's surface. The Moon takes 28 days to revolve around the Earth. During this cycle, the Moon's appearance from Earth changes, depending on the relative positions of the Moon, Earth, and sun. The chart below shows how the phases of the Moon appear from Earth. After a waning crescent, the cycle continues, returning to the new moon phase.



Sometimes the Moon, Earth, and sun all align so that one body blocks the sun's light from the other. These events are called ***eclipses***.



In a ***lunar eclipse***, the Earth comes between the sun and the Moon, it blocks the sun's light from reaching the Moon.



In a ***solar eclipse***, the Moon comes between the Earth and the sun, blocking the sun's light and casting a shadow on the Earth.

The Moon also affects Earth in other ways. The gravitational pull of the Moon is responsible for the tides that occur in large bodies of water on Earth such as oceans.

Life Science

Cells and Organisms

Cell Structures

All living things are made up of **cells**, the basic structural unit of organisms. Cells are the smallest units of life that can replicate themselves independently. Some organisms consist only of a single cell, while others may contain trillions.

There are two basic types of cells—prokaryotic and eukaryotic. Prokaryotic cells do not contain a nucleus and exist as single-celled organisms. All other types of organisms are made up of eukaryotic cells, which do contain a nucleus, as well as several other basic parts, as shown in the following table:

Cell Part	Function
Nucleus	Control center of the cell; contains DNA
Cytoplasm	Thick solution of water, salt, and proteins that exists outside the nucleus and is contained within the cell membrane; everything else in the cell “floats” in the cytoplasm
Ribosomes	Make proteins
Golgi Bodies	Package and distribute proteins
Mitochondria	Make energy (ATP); called the “powerhouse of the cell”
Endoplasmic Reticulum	Transports substances throughout the cell
Vacuoles	Store food and water
Lysosomes	Contain enzymes that are used to break down molecules—the digestive system of the cell
Cell Membrane	Permeable outer barrier of the cell

In addition to these parts, plant cells also contain several unique structures:

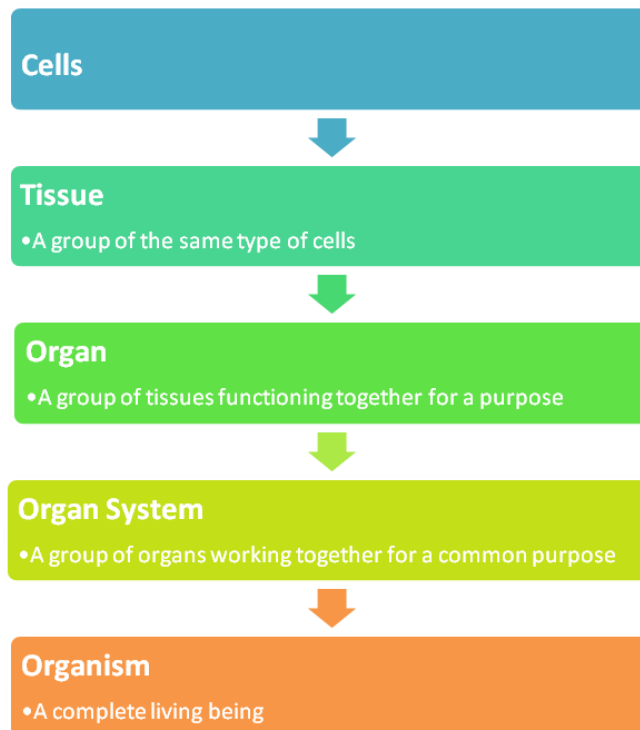
Plant Cell Part	Function
Cell Wall	Rigid outer boundary of the cell
Chloroplasts	Contain chlorophyll; involved in photosynthesis

Cellular Replication

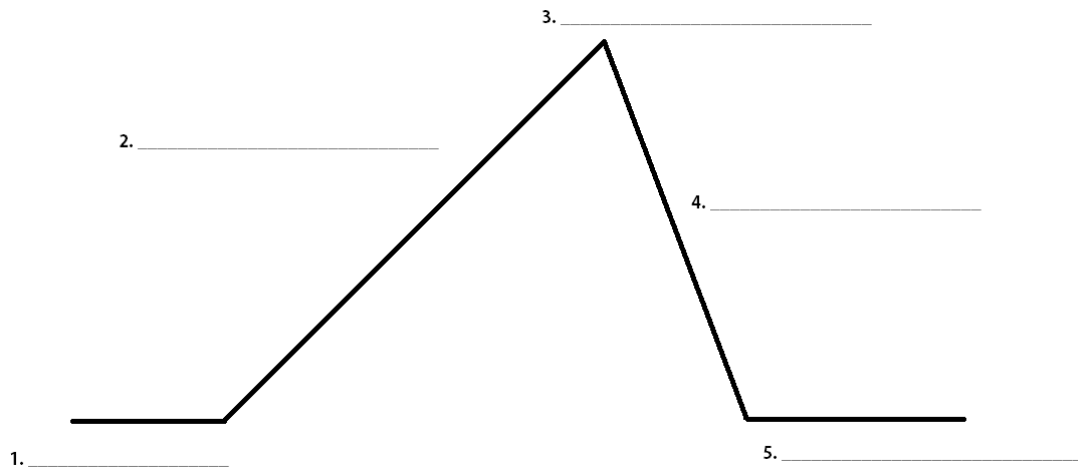
Cells need to be able to replicate themselves. The two main methods of cellular replication are mitosis and meiosis. In **mitosis**, a cell creates an exact copy of itself. **Meiosis**, on the other hand, results in a new cell that is genetically different from the parent cell(s). This is the process involved in sexual reproduction.

Cellular Organization

Groups of cells can be organized into increasingly complex structures.



- 9.) "My heart raced as the door gave a long, eerie creak. After an eternity, the door stood fully open to reveal a silhouette, black as the night against the light pouring in from the next room." The passage above contains examples of all of the following literary devices EXCEPT
- a) hyperbole
 - b) simile
 - c) alliteration
 - d) onomatopoeia
- 10.) The denouement of a piece of narrative fiction is also known as its
- a) setting
 - b) climax
 - c) point of view
 - d) resolution
- 11.) Which of these types of poetry must contain end rhyme, by definition?
- a) Acrostic
 - b) Limerick
 - c) Haiku
 - d) Concrete



- 12.) The diagram above is used to track the plot of a narrative. The number 3 on the diagram represents the story's
- a) exposition
 - b) rising action
 - c) climax
 - d) resolution
- 13.) "While my father cooked dinner, I did my homework." The sentence above is classified as
- a) simple
 - b) compound
 - c) complex
 - d) compound-complex
- 14.) Targeting a specific audience is most likely to affect the author's _____ in composing a piece of persuasive writing.
- a) grammar
 - b) tone
 - c) organization
 - d) point of view

- 15.) Which of the following is the best example of an imperative sentence?
- a) Clean your room.
 - b) Your room needs to be cleaned.
 - c) Will you clean your room?
 - d) You should clean your room.
- 16.) Which of these elements of writing should be examined during the revising, rather than the editing, stage of the writing process?
- a) punctuation
 - b) clarity
 - c) grammar
 - d) spelling
- 17.) "Dave and John went to his house after school."
The sentence above contains which of the following errors?
- a) Misplaced modifier
 - b) Pronoun ambiguity
 - c) Agreement error
 - d) Verb tense error

- 98.) The Federal Reserve's decision to lower interest rates is part of federal monetary policy. The goal of maintaining low interest rates is to
- a) encourage consumer spending
 - b) consolidate private loans into public banks
 - c) raise cost of homeownership
 - d) decrease inflation

Questions 99-100 refer to the map below.

Genoese Map of the World, 1457



Source: http://commons.wikimedia.org/wiki/File:Genoese_map.jpg

- 99.) The above map is an example of which type of source?
- a) Isolated source
 - b) Primary source
 - c) Secondary source
 - d) Tertiary source

- 100.) Which of the following conclusions can be made by examining the map above?
- a) The map was made during the Age of Discovery.
 - b) The geographer was a Spaniard.
 - c) Most material goods were exported from Europe to North Africa.
 - d) The Chinese Empire was the first to create an accurate map.
- 101.) The Continental Divide is located in which of the following mountain ranges?
- I. Rocky Mountains
 - II. Canadian Rockies
 - III. Andes Mountains
- a) I only
 - b) I and II only
 - c) III only
 - d) I, II, and III
- 102.) In which of the following countries did the Industrial Revolution begin?
- a) Germany
 - b) France
 - c) United States
 - d) Great Britain
- 103.) Which of the following events was a crucial turning point in the American Revolution?

- a) The Boston Massacre
 - b) Entry of the French as allies of the Americans
 - c) Battle of Bunker Hill
 - d) Battle of Lexington and Concord
- 104.) Which of the following is NOT a right guaranteed to United States citizens in the Constitution?
- a) Right to bear arms
 - b) Right to peaceably assemble
 - c) Right to petition
 - d) Right to privacy
- 105.) As the price of a good increases, the amount of the good offered to consumers will also increase. What economic principle does this describe?
- a) Law of Demand
 - b) Law of Supply
 - c) Law of Equilibrium
 - d) Law of Inference
- 106.) The thinnest layer of the Earth is the
- a) inner core
 - b) outer core
 - c) mantle
 - d) crust
- 107.) Volcanoes are the result of which type of tectonic plate boundary?
- a) Divergent
 - b) Convergent
 - c) Transform

d)Dormant

108.) Which of the following is classified as a sedimentary rock?

- a)Granite
- b)Marble
- c)Sandstone
- d)Slate

109.) Which of these natural forces can be responsible for weathering but not erosion?

- a)Precipitation
- b)Wind
- c)Sunlight
- d)Groundwater

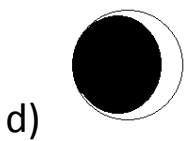
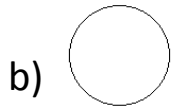
110.) Fossils are primarily studied by which type of scientist?

- a)Geologist
- b)Biologist
- c)Botanist
- d)Paleontologist

111.) In our solar system, located between Mars and Jupiter is

- a)the Moon
- b)Saturn
- c)the Asteroid Belt
- d)Earth

112.) Which of the following best represents the appearance of the Moon from Earth during the waxing crescent phase?



113.) In the Scientific Method, which of these steps should occur before making a hypothesis?

- a) Research
- b) Data analysis
- c) Experimentation
- d) Drawing conclusions

114.) The rightmost column of the Periodic Table of the Elements contains elements that are classified as

- a) metals
- b) noble gases
- c) halogens
- d) metalloids

115.) Which part of a cell is responsible for making energy in the form of ATP?

- a) Ribosome
- b) Mitochondria
- c) Vacuoles
- d) Golgi bodies

- 116.) Which of these is a product rather than an ingredient of photosynthesis?
- a) Water
 - b) Chlorophyll
 - c) Oxygen
 - d) Carbon dioxide
- 117.) Which of the following does NOT correctly pair a human body system with an organ of that system?
- a) Respiratory system – esophagus
 - b) Nervous system – brain
 - c) Digestive system – small intestine
 - d) Regulatory system – thyroid

Answer Key And Answer Explanation Tutorial:

9.) Answer C

Hyperbole (A) is the use of exaggeration to make a point. The phrase "After an eternity" is a hyperbole because it did not literally take an eternity for the door to open.

A simile (B) is a comparison between two things using "like" or "as." "Black as the night" is a simile.

Alliteration (C) is the repetition of an initial sound in a group of words (e.g., "big, blue ball"). This passage does not contain alliteration, therefore (C) is the correct answer.

Onomatopoeia is a word that represents a sound. "Creak" is an onomatopoeia, describing the sound of the door slowly opening.

10.) Answer D

Denouement is another word for the resolution or conclusion of a narrative. The denouement comes at the end of a narrative, showing how the conflict resolves.

Setting (A) is the time and place in which the story takes place.

Climax (B) is the peak or turning point of the story, where the major conflict comes to a head.

Point of view (C) is the perspective from which the story is told.

11.) Answer B

End rhyme is the most common type of rhyme in poetry, in which the rhyming words occur at the ends of lines. A limerick (B) is a type of poetry that always contains end rhyme, structured with a rhyme scheme of AABBA.

An acrostic (A) is a poem in which the first letters of each line together form a word. Acrostics need not contain any rhyme.

A haiku (C) is defined by its syllabication pattern—5-7-5—and does not need to contain rhyme.

A concrete poem (D) is one in which the words form a shape related to the subject of the poem. For instance, a poem related to nature may be written into the shape of a tree. A concrete poem does not necessarily contain rhyme.

12.) Answer C

This is a plot diagram, which is read from left to right to trace the progression of a narrative. (1) is the exposition (A) or introduction to the story. (2) is the rising action, in which the tension builds toward the climax. (3) is the climax (C), which is the peak or turning point of the story. (4) is the falling action, where the story moves towards (5)—the resolution (D), also called the conclusion or denouement.

13.) Answer C

To answer this question, you need an understanding of the different types of clauses and sentences. A clause is a group of words containing a noun and a predicate verb. There are two types of clauses—*independent* and *dependent*. An independent clause is one that could stand on its own as a complete sentence. A dependent clause, on the other hand, cannot stand alone as a complete sentence. For example, consider the sentence given in this question: "While my father cooked dinner, I did my homework." In this sentence, there are two clauses—"While my father cooked dinner" and "I did my homework." "I did my homework" is an independent clause because it could stand alone as a complete sentence. "While my father cooked dinner" is a dependent clause because it could not stand alone as a complete sentence. Different types of sentences can be formed by joining

independent and dependent clauses in different combinations. A simple sentence (A) consists only of one independent clause (e.g. "I did my homework.").

A compound sentence (B) is made up of two independent clauses combined by a conjunction or by a punctuation mark such as a semicolon (e.g. "My father cooked dinner and I did my homework.").

A complex sentence (C) consists of one independent clause and one dependent clause. The original sentence ("While my father cooked dinner, I did my homework.") is complex sentence. This is the correct answer.

A compound-complex sentence (D) contains two independent clauses and at least one dependent clause (e.g. "While my father cooked dinner, I did my homework and my brother set the table.").

14.) Answer B

Depending on the intended audience, an author may alter his or her tone to appeal to that specific group of people.

Grammar (A), how the piece is organized (C), and the author's point of view (D) would not really change according to the audience.

15.) Answer A

An imperative sentence is written in the form of an instruction or command. Sentence (A) is structured as a command for the listener to clean his or her room.

(B) and (D) are declarative sentences, which are statements rather than demands.

(C) is an interrogative sentence—a question.

16.) Answer B

The stages of the writing process are brainstorming/planning, drafting, revising, editing, and publishing. After planning and writing a first draft comes the revising process, in which the draft is altered for meaning, clarity (B), organization, and logic. Revision can involve major changes in what you say and how you say it. Editing comes afterward and involves fine-tuning, such as proofreading for punctuation (A), grammar(C), and spelling (D). These changes help to polish the piece of writing and get it ready for the final stage—publishing the final copy.

17.) Answer B

This sentence contains pronoun ambiguity. A pronoun is a generic noun that takes the place of a more specific noun.

Pronouns include words like he, she, it, we, they, his, hers, ours, yours, its, him, her, and them. The specific noun that a pronoun is standing in for is called the antecedent. For example, in the sentence "Lisa walked her dog", "her" is the pronoun and "Lisa" is the antecedent. It needs to be clear what the antecedent of each pronoun in a sentence is. In the sentence in this question, the pronoun "his" could refer either to "Dave" or to "John." Because this is unclear, it is known as ambiguity and is considered an error.

98.) Answer A

Lower interest rates allow consumers and banks to borrow more money, increasing the amount of available capital and therefore the amount of spending. Although the economy is invigorated, the increased amount of money available raises inflation.

Conversely, when the interest rates are increased, inflation tends to decrease (D) and the cost of loans increases.

99.) Answer B

Primary sources are documents written or created during the time period studied. Drafted in 1457, this “Genoese Map of the World” can be used to assess the ideas held by geographers at the time.

100.) Answer A

The map claims to be a world map and yet does not include the Americas, south of Africa, Australia, or Antarctica. It does, however, include significant portions of the coast of Africa.

The Portuguese voyages sponsored by Prince Henry to map the coast of Africa were the beginning of the Age of Discovery, a period of European overseas exploration in the 15th-17th centuries.

The map does include both Spain (B) and China (C) but there is no indication that cartographers from either of these places created the map. Since the map is labeled as Genoese, it is most likely that its creator was Italian.

The map does not include information about exports (C).

101.) Answer D

The Continental Divide begins in northwest Alaska, follows the Canadian Rockies south into the Rocky Mountains, runs

through Mexico and into South America along the Andes Mountains. It separates the Atlantic and Pacific Ocean watersheds.

102.) Answer D

The Industrial Revolution began in Great Britain in the late 18th century. Multiple factors combined to generate the Revolution here first. Among them are the earlier Agricultural Revolution, cottage industries, population growth, plentiful coal and iron deposits, widespread acceptance of Enlightenment thought, and navigable rivers and canals.

103.) Answer B

The entrance of the French army as American allies in 1778 was a crucial victory for the former colonies. The French brought much needed supplies, arms, troops, and naval support. Eventually the alliance led to the British surrender at Yorktown in 1781.

The Boston Massacre (A) of 1770 was one of a series of events that caused the American Revolution.

The battles at Lexington and Concord (D) and at Bunker Hill (C) were among the earliest battles of the war and were not turning points.

104.) Answer D

The right to privacy is not specifically enumerated in the Bill of Rights. The right to bears arms (A) is in Amendment 2; the rights to peaceably assemble (B) and petition (C) are in Amendment 1.

105.) Answer B

The law of supply, graphically represented as an upward sloping curve, holds that suppliers will produce more goods for

a higher price.

The law of demand (A) holds that consumers will want to buy more of a good when the price lowers.

Equilibrium (C) for a product's price is reached when the price brings the amount supplied to meet the amount demanded.

The Law of Inference (D) is not a part of common economic theory.

106.) Answer D

The Earth's outermost layer—the crust—is also its thinnest. The crust is the surface of the Earth on which all life resides. It ranges from 5 to 30 miles thick.

The inner core (A) is the innermost layer of the Earth. It is a solid mass that is approximately 700-800 miles in diameter. The outer core (B) is a roughly 1,400 mile thick layer of liquid metal.

The mantle (C) is a layer of hot, semi-solid rock on which the crust floats. It is approximately 1,800 miles thick.

107.) Answer B

Convergent plate boundaries occur where tectonic plates move toward one another and collide. This causes the crust at the boundary to be pushed upward. This creates volcanoes, mountains, and ridges.

Divergent plate boundaries (B) occur when plates move away from one another, separating. This creates new crust as mantle is exposed and cooled.

Transform plates boundaries (C) occur when plates rub up against one another. This causes earthquakes.

Dormant (D) is not a type of plate boundary, but rather, a word used to describe an inactive volcano.

108.) Answer C

Sedimentary rock is formed by the compression of particles such as sand, other rocks, fossils, and shells. As the name implies, sandstone is made of compressed sand and is therefore classified as a sedimentary rock.

Granite (A) is an igneous rock. Igneous rocks are formed by the cooling of magma.

Marble (B) and slate (D) are metamorphic rocks. Metamorphic rocks are formerly igneous and sedimentary rocks that have morphed due to heat and pressure.

109.) Answer C

Weathering is the breaking down or wearing away of rock by natural forces such as water, wind, or the sun. Erosion is the process of broken-down material actually being carried away, typically by wind or water. While the light and heat of the sun can contribute to weathering, it cannot carry particles away so it is not responsible for erosion.

110.) Answer D

Paleontologists study fossils—the petrified remains or casts of remains of once-living organisms.

Geologists (A) study rocks.

Biologists (B) study living organisms.

Botanists (C) study plants.

111.) Answer C

Between Mars and Jupiter, there is large group of asteroids known as the Asteroid Belt.

The Moon (A) orbits Earth and can therefore be said to be between Earth and Mars or between Earth and Venus, but not between Mars and Jupiter.

Saturn (B) and Earth (D) are both planets. There are no planets between Mars and Jupiter. In order from closest to the sun to farthest, the planets in our solar system are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

112.) Answer D

As the moon orbits the Earth, the same side of the moon is always visible to Earth (known as the near side of the moon). As the moon moves around the Earth in its orbit, the changing positions between the Earth, moon, and sun make the moon appear different from the Earth at different points in the moon's revolution. These changes are cyclical in nature as the moon completes its 28-day orbit and are known as the phases of the moon. (D) shows the phase known as a waxing crescent. A crescent moon occurs when less than half of the near side of the moon is visible. Waxing means that it is getting larger, moving toward a full moon.

(A) shows a waning gibbous. A gibbous occurs when the near side of the moon is more than half-visible. Waning occurs as the moon appears to get smaller, moving toward a new moon. (B) is a full moon. A full moon occurs when the near side of the moon is entirely visible from Earth.

(C) is a 1st quarter moon. In a quarter moon, half of the near side of the moon is visible and half is not.

113.) Answer A

The steps of the Scientific Method are:

1. Ask a question
2. Research the topic
3. Make a hypothesis
4. Experimentation
5. Data collection and analysis
6. Draw conclusions

114.) Answer B

The rightmost elements on the Periodic Table are helium, neon, argon, krypton, xenon, and radon, collectively known as the noble gases. Metals (A), halogens (C), and metalloids (D) are other classifications of elements found elsewhere on the Periodic Table.

115.) Answer B

Mitochondria are called the powerhouse of the cell and they are responsible for creating energy in the form of ATP.

Ribosomes (A) make proteins.

Vacuoles (C) store food and water.

Golgi bodies (D) package and transport proteins.

116.) Answer C

Photosynthesis is the process by which the plant uses its chlorophyll, water, nutrients, carbon dioxide, and energy from the sun to produce food and oxygen.

117.) Answer A

The esophagus is a tubular organ that allows food to travel between the mouth and the stomach. It is part of the digestive system, which provides nutrients to the body through the digestion of food.

The nervous system (B) carries electrical signals from the brain to the rest of the body through nerves.

The small intestine (C) is another organ of the digestive system.

The regulatory system (D) regulates body functions in an effort to maintain homeostasis. The thyroid is a part of that system and is responsible for regulating many of the body's hormones.