

v.7 - rev. 8/14/02

WHG1

About this outline of world history and geography:

The following pages describe significant people, places, events and concepts in the study of humankind. This outline forms the core of our study; it will be fleshed-out by classroom discussions, audio-visual materials, readings, writings and other activities.

This knowledge will help you understand what it means to be human and how the world came to be the way it is today. It will also help you understand many of the books, news reports, films, articles and events you will encounter throughout the rest of your life.

from: www.studentsfriend.com

The Student's Friend

WORLD HISTORY & GEOGRAPHY 1

prehistory through the Renaissance

HISTORY

What is history?

History is the story of humankind.

Why study history?

- History shows us what it means to be human.
- History shows us how the world works.
- History affects our lives directly or indirectly every day.
- History helps us make judgments about current and future events.
- History is a fascinating story of human treachery and achievement.

GEOGRAPHY

What is geography?

Geography is the study of our home, the surface of the planet earth.

Why study geography?

- Geography is a major factor affecting human history and development.
- Humans are a major factor affecting the future of planet earth.

CONTENTS:

Unit 1 - Origins of the Earth and humans: <i>the stage and the actors</i>	Page 1
Unit 2 - Mesopotamia and the Middle East: <i>civilization arises</i>	Page 3
Unit 3 - Ancient Egypt: <i>in search of immortality</i>	Page 5
Unit 4 - Ancient Greece: <i>source of Western Civilization</i>	Page 7
Unit 5 - Ancient China and Asia: <i>source of Eastern Civilization</i>	Page 11
Unit 6 - Ancient Rome: <i>organization and disintegration</i>	Page 15
Unit 7 - The Middle Ages: <i>Europe from chaos to dominance</i>	Page 19
Unit 8 - Renaissance and the New World: <i>the modern mind emerges</i>	Page 23

Copyright © 2002 Michael G. Maxwell

The *Student's Friend; World History & Geography 1* may be freely reproduced and distributed by teachers and students for educational purposes. It may not be reproduced or distributed for commercial or other purposes without permission.

See www.studentsfriend.com for more information and related teaching materials.

Unit 1 - Origins of the Earth and humans; *the stage and the actors*

MAP IDENTIFICATION: Europe, Asia, Africa, Antarctica, Australia, North America, South America, Pacific Ocean, Atlantic Ocean, Indian Ocean, Arctic Ocean, Great Rift Valley, Bering Strait

Big Bang theory

Most astronomers agree that the universe probably began with an event similar to an explosion, a big bang. The universe is a term for all of outer space including the planets, stars and galaxies. Galaxies are clusters of hundreds of millions of stars, and there are hundreds of millions of galaxies in the universe. Our world, Earth, is located in the Milky Way galaxy, named after the milky-looking band of stars stretching across the night sky which is an edge-on view of our galaxy.

The Big Bang theory is supported by observations which indicate that galaxies in space are moving away from Earth. Astronomers use the speed of this movement to estimate the age of the universe at about 10-15 billion years. Many scientists accept a figure of about 5 billion years as the age of Earth.

continents

Geographers divide most of the land surface of the earth into seven large land masses called continents. The continents are **Europe, Asia, Africa, Antarctica, Australia, North America, and South America**. (Note: Names of continents all begin with the letter 'A' except Europe.)

The Ural Mountains of Russia separate Europe from Asia. Europe and Asia are both part of a single land mass called **Eurasia**.

plate tectonics

According to the theory of plate tectonics, the earth's surface is composed of about a dozen plates of solid material that slowly move as they float on a bed of magma, or molten rock. In other words, the surface of the earth resembles a cracked egg shell, and the pieces of the shell are moving. These plates include both the ocean floor and the continents. The continents are simply high areas on the plates above sea level, so both the continents and the sea floor move with their plates. This movement was once called continental drift, but now we know that more than just the continents are moving.

Earthquakes and volcanoes often occur at boundaries between plates as the plates push together, spread apart or slide against one another. For example, the Pacific Plate is slowly grinding past the North American Plate in California creating enormous pressures along the San Andreas Fault which are expected to produce a devastating earthquake sometime within the next few decades.

Scientists believe that all of the present continents might have been together in a single large land mass long ago before they broke apart and drifted to their present locations on the earth. This possible supercontinent of the past is called **Pangaea**.

oceans

More than two-thirds of the earth's surface is water and 97% of that water is found in the earth's four oceans, the **Pacific**, the **Atlantic**, the **Indian**, and the **Arctic**. Because ocean water is salty, it cannot be used for drinking, farming, or manufacturing.

The **Seven Seas** is a very old and still popular expression for the world's oceans.

Great Rift Valley

This is a valley in eastern Africa where two of the earth's plates are spreading apart exposing the fossil remains of early humans. **Fossils** are the remains of living organisms in which the living tissue has slowly been replaced over time by stone-like material which preserves the form of the original organism. The Great Rift Valley might be the location where human life began and spread to other areas of the earth, making humans the most widespread species in the world.

The **Olduvai Gorge** area of the Great Rift Valley was the site of famous discoveries by the husband and wife team of Louis and Mary Leakey which helped to fill in gaps in the human record. Discoveries continue to be made in the Olduvai Gorge by later generations of the Leakey family and other paleontologists. (Paleontologists are scientists who study the fossils of plants and animals.)

The Leakey's son, Richard, has written: "The most obvious product of our hands and brains is technology. No other animal manipulates the world in the extensive and arbitrary way that humans do...Humans are unique because they have the capacity to choose what they do."

Australopithecus

Australopithecus was an extinct member of the **hominid** family, the biological family that includes modern humans. Australopithecus lived in Africa from about 4 to 1 million years ago. Found in the Great Rift Valley of Africa, the skeletal remains of a female called **Lucy** was the first discovery of an early species of Australopithecus. Because Australopithecus walked on two feet and had a relatively large brain, it could be considered an early human, although most scientists consider it to be prehuman. Walking upright was a big advantage; it left both hands free to carry burdens and to use primitive tools. Australopithecus is Latin for “southern ape.” (Many scientific terms in use today are derived from Latin, the language of the ancient Roman Empire.)

Culture

Culture is the knowledge and achievements that are passed on from one generation to another to form the way of life shared by a group of people. Most people living in Europe and America share a common culture known as **Western Civilization**, also called Western culture or simply, “the West.” “The East” refers to Asia and Asian culture.

Human culture may have begun with **Homo erectus**, another extinct member of the hominid family who lived from about two million to a half million years ago: his name is Latin for “upright human,” and Homo erectus is sometimes called **Java** man after the island in Southeast Asia where the first Homo erectus remains were found. Homo erectus is the first hominid known to have lived outside Africa.

Evidence from archeology indicates that Homo erectus developed a culture that included the construction of shelters and the use of hand axes and fire. Fire was powerful; it meant that humans could keep human predators at bay, eat better by cooking their food and extend their habitat into colder climates. If the definition of human is the ability to create new inventions, Homo erectus might qualify. If Homo erectus was the first human, then humans have walked the earth for two million years. By contrast, dinosaurs were the dominant life form on earth for 135 million years. (**Archeology** is the scientific study of the remains of past human life and human activities.)

Homo sapiens

This is the biological classification of modern humans. The earliest Homo sapiens was **Neanderthal**, who developed about 400,000 years ago and became extinct shortly after encountering another human species with a more advanced culture including better weapons. Neanderthals are classified as Homo sapiens neanderthalis (the first fossil was found in the Neander Valley of Germany). The species that replaced them is Homo sapiens sapiens which is us, modern day humans. One of the earliest examples of Homo sapiens sapiens is called **Cro-Magnon** man after the area in southern France where his fossilized remains were found. Homo sapiens is Latin for “wise human.”

Stone Age

Historians have divided history into three eras based on the kinds of tools, or **technology**, that people used during these periods: the Stone Age, the Bronze Age and the Iron Age. The Stone Age occurred during **prehistoric** times, before humans developed writing and civilization. It began about 250,000 B.C. and ended about 4,000 B.C. when the Bronze Age began in the Middle East. (These ages began at different times in different places.) During the Stone Age, people learned to use fire and make stone tools and weapons; they developed spoken language and farming. The earliest discoveries of human art are from the Stone Age and include magnificent cave paintings found in southern France and northern Spain dating from 15,000 to 17,000 years ago.

Paleolithic is a scientific term applied to the early Stone Age when humans made their living by hunting and gathering wild food such as berries. **Neolithic** is the late Stone Age when agriculture began and copper tools were developed. (Neo means new; lithic means stone. Both terms come from Greek, another ancient language which contributed to the modern language we use today.)

Bering Strait

There have been several **Ice Ages** when the world became colder and huge sheets of ice covered much of the Northern Hemisphere. Water locked in the ice sheets lowered the level of the oceans and exposed land all over the world that had been under water. Scientists believe land exposed at the **Bering Strait** formed a “land bridge” where Asian peoples, who were following wild game herds, crossed from Asia to America sometime between thirty and ten thousand years ago (or maybe they crossed by boat). These nomadic hunter-gatherers became the Native American peoples of North and South America, the last two habitable continents to be occupied by humans.

A **strait** is a narrow body of water connecting two larger bodies of water. The Bering Strait (50 miles wide) connects the Pacific Ocean to the Arctic Ocean between Russia and Alaska. Another notable strait, the Strait of Gibraltar (8 miles wide) connects the Atlantic to the Mediterranean Sea.

Unit 2 - Mesopotamia and the Middle East; *civilization arises*

MAP IDENTIFICATION: Middle East, Mesopotamia, Tigris and Euphrates Rivers, Israel

Middle East

We can trace our Western culture back to the Middle East, a region in western Asia and northeast Africa. Agriculture first developed in the Middle East, and about 5,000 years later it was the site of the world's first civilization. The Middle East was also the birthplace of three major world religions, Judaism, Christianity, and Islam. The Middle East includes Turkey, Iran, Iraq, Israel, Syria, Jordan, Saudi Arabia and Egypt. This area is sometimes called the **Near East** or **Southwest Asia**.

The Middle East is important today as the major oil producing region of the world and as a hot spot of international conflict including the continuing struggle between Arabs and Israelis.

stages leading to civilization

Important stages of early human development leading to civilization included tool making, cooperative hunting, spoken language, art, religion and agriculture. All these stages began during prehistoric times, before civilization and written language existed.

We can see the beginnings of **religion** in the burials of early humans which often included objects such as tools and ornaments, presumably for use in the afterlife. Religion may have begun as a way to deal with the human awareness of death. Most early religions worshiped several gods, a practice called **polytheism**. Gods often represented the forces of nature such as water and the sun.

agriculture

Agriculture includes the raising of livestock and farming, and it was agriculture that made civilization possible. Agriculture began about 8,500 B.C. during the late Stone Age when humans discovered they could plant and harvest a wheat plant growing wild in the Middle East. At about the same time, people began domesticating wild animals (raising them). Today, the cows of India have a hump because the wild cows of India had a hump while wild cows of Europe did not.

The earliest known food production and domestication of animals occurred in the **Fertile Crescent**, a region of the Middle East that curved from southern Turkey to present day Israel. Agriculture meant people could stop following wild game herds and settle in one place, grow crops, and build cities. People could also collect more possessions which encouraged the invention of new technologies such as pottery-making. From the Fertile Crescent agriculture spread through Europe and Asia and to Africa. (When ideas or technology spread from one place to another, it is called **cultural diffusion**.) Because agriculture could support more people per square mile than hunting and gathering, agriculture resulted in a huge jump in human population from about two million people during the early Stone Age to about 60 million during the late Stone Age.

Farmers learned to grow more food than they needed for their own use, resulting in a **surplus**. Agricultural surpluses made it possible to accumulate wealth, and they led to **job specialization** because not everyone had to raise his own food to make a living; some people could specialize in non-agricultural work (like making pottery, or becoming priests or government officials) and be supported by others from the agricultural surplus. Agriculture was the primary basis of wealth in most societies until the industrial age.

Jericho

Jericho is a city in the Middle East (in the modern country of Jordan) often considered to be the world's first city. The city grew at the site of a spring during the late Stone Age. Massive walls were constructed around Jericho to protect its stores of agricultural surplus from nomadic raiders.

It has been suggested that warfare began at Jericho. Various bands of nomadic raiders such as barbarians, Vikings and Mongols continued to attack and steal from civilized societies throughout much of history. One modern historian has described warfare as nothing more than "highly-organized theft."* The Bible tells the story of Joshua, a Hebrew leader who attacked Jericho and had priests blow horns which caused the walls to come tumbling down. (*Jacob Bronowski, *Ascent of Man*)

civilization

Civilization was made possible by agriculture which permitted humans to settle permanently in one place and build cities. The world's first civilization developed in a region called Mesopotamia in the Middle East. Large groups of people living in cities encouraged job specialization, the development of government, and written language which are all important features of civilization. Writing began as a way to record business transactions, particularly the exchange of agricultural products. When people started to write, prehistoric times ended and **historic times** began.

Cities and writing are considered to be the primary hallmarks of civilization.

Mesopotamia

Mesopotamia is known as the “cradle of civilization” because it is here that civilization began. Mesopotamia is a **region**, not a country, within the larger region of the Middle East. (Regions are the basic units of geography. A region is an area on the earth with consistent cultural or physical characteristics. Regions may be large, such as the Middle East, or they may be smaller, such as Mesopotamia.) Mesopotamia was home to the world’s first civilization beginning about 3500 B.C., which is considered to be the beginning of **Ancient Times**. Most of Mesopotamia is located within the modern country of Iraq, and Mesopotamia was part of the Fertile Crescent.

Mesopotamia lies between the **Tigris and Euphrates Rivers**, and the name Mesopotamia means “between the waters” in Greek. It was here that farmers learned to build irrigation systems that turned the dry and desolate valley into a prosperous center of agriculture that supported many people. As settlements grew into busy cities, this region, called **Sumer**, became the world’s first known civilization. The Sumerians built walled cities with great **ziggurats** (large pyramid-like temples), and they developed the earliest known form of writing called **cuneiform**, in which **scribes** (record-keepers) carved symbols onto wet clay tablets which were later dried. The Sumerians are credited with writing the world’s oldest story, the *Epic of Gilgamesh*, about the life of a Sumerian king. The Sumerian number system was based on 12 which explains why we have 60-minute hours, 24 hour days, 12 month years, and 360 degree circles.

Babylon

Because the fertile valley of Mesopotamia had no natural barriers, it attracted many raiders and conquerors; civilizations came and went amid much warfare. One of the most powerful was Babylon which developed after Sumer (1900 to 500 B.C.). Babylon was famed for its hanging gardens (one of the Seven Wonders of the Ancient World) which were watered by a screw mechanism that drew water from the Euphrates River below. Babylon was also known for the **decadent** life-style of its people; the term “a Babylon” has come to mean a place of corruption and sin.

The Old Testament of the Bible mentions the **Tower of Babel** which the builders hoped would reach to heaven, but God confused the builders’ language so that they could no longer understand one another’s speech, and this is how the peoples of the world came to speak different languages. A “Tower of Babel” now means a place of confusion and noise where people “babble.”

The Code of Hammurabi

Hammurabi was a king of Babylon around 1800 B.C. who brought much of Mesopotamia under his control. He helped unite the Babylonian **empire** (collection of states) by publishing a remarkable set of laws known as the Code of Hammurabi, history’s first known written laws. He had the 300 laws of the code carved onto a stone pillar for all to see which meant that nobody was above the law; it applied to everyone. The goals of Hammurabi’s Code included, “stable government and good rule...that the strong may not oppress the weak.” (A **state** is an independent self-governing region such as a country. The United States was originally a collection of states that became united.)

Hebrews

Hebrews were an ancient people of the Middle East who established the kingdom of **Israel** in about 1000 B.C. and founded the Jewish religion of **Judaism**. The Israelites were conquered by the Babylonians in the 500s B.C. and were taken to Babylon in chains. During the exile in Babylon, Jewish scribes wrote much of the Old Testament of the Bible in effort to preserve Hebrew culture and religion. One of the Psalms of the Bible says, “By the waters of Babylon, we lay down, yea we wept.” Over the centuries since then, Jews have settled in many parts of the world, but they have maintained their identity as a people.

Many of the laws contained in the Old Testament of the Bible have a basis in the Code of Hammurabi such as “An eye for an eye, and a tooth for a tooth.” Unlike most people of the time, followers of Judaism believed in one God, **monotheism**. The modern day effort by Hebrews to regain their ancient homeland of Israel has led to conflict in the Middle East because Palestinian Arabs were living in the lands taken over by Israel following World War II.

Bronze Age

The Stone Age was followed by the Bronze Age when people began to make bronze tools and weapons. The Bronze Age is important in history because this is when civilization and writing began, marking the end of prehistoric times. The Bronze age lasted from roughly 4000 B.C. to the beginning of the Iron Age in about 1000 B.C. During the Bronze Age, people learned to make bronze tools by combining copper with tin which produced a harder metal than copper alone and it held an edge much longer. The Bronze Age was a time of great invention; the wheel, plow, writing, money, cities, armies and chariots all came into existence during the Bronze Age in Mesopotamia.

Unit 3 - Ancient Egypt and Africa; *in search of immortality*

MAP IDENTIFICATION: Africa, Mediterranean Sea, North Africa, Sahara Desert, sub-Saharan Africa, Egypt, Nile River, Cairo

Africa

South of Europe lies Africa, the second-largest continent after Asia. Africa's major geographic features include tropical rain forests along the west coast, the Sahara Desert in the north and the Kalahari Desert in the south. In eastern Africa are the Great Rift Valley, the Nile River, and Africa's highest mountain, Mt. Kilimanjaro.

North Africa is the name given to the region of Africa bordering the Mediterranean Sea including the Sahara Desert and lands lying to the north of the desert including the Atlas Mountains and the modern countries of Morocco, Algeria, Tunisia, Libya, and Egypt.

Africa was the home of important early civilizations along the Mediterranean Sea, particularly in Egypt, at Carthage and in Morocco. Most of Africa was colonized by European nations in the 1700s and 1800s. In the middle of the twentieth century, the colonies gained their independence.

Sahara

At 3.5 million square miles, the Sahara is the world's largest desert. The Sahara is located in North Africa and it separates North Africa from **sub-Saharan Africa**, the region of Africa which lies south of the Sahara Desert. Sub-Saharan Africa has sometimes been called "black Africa" because people living there have darker skins than North Africans. Dark skin appears to be an adaptation to climate. People living near the equator need more skin pigment to protect them from intense rays of the sun while people living closer to the poles have paler skins allowing them to absorb more sunlight. People with black skins also live near the equator in India and in Australia.

In modern times, the arts of sub-Saharan Africa have exerted a strong influence on Western culture, inspiring modern art and forming the roots of the blues, jazz, and rock-and-roll.

savanna

The savanna is a land area in sub-Saharan Africa with grasslands and scattered trees. The savanna is home to many of the famed large wild animals of Africa such as lions, giraffes, and elephants. The African governments of Tanzania and Kenya have created huge game preserves to protect the wildlife of the savanna.

Nile River

The Nile River originates in the highlands of central Africa and flows north for more than 4,000 miles to the Mediterranean Sea where it forms a wide **delta** in northern Egypt. The Nile is the longest river in the world. (Deltas are flat, low-lying areas of land that sometimes form at the mouths of rivers where they empty into the sea. Rivers carry sediment which may fill a river's mouth creating a fan-shaped delta, forcing the river to form several shifting channels to the sea.)

The Nile River Valley was the site of one of the world's first great civilizations in ancient Egypt. Egypt is said to be a "gift of the Nile" because the river provided irrigation water, fertile soils due to annual floods, and transportation. The wealth of the Pharaohs came from the bountiful agriculture made possible by the Nile. The river was considered sacred by ancient Egyptians; it separated the "land of the living" on the east bank (where the sun rises) from the "land of the dead" on the west bank (where the sun sets).

Egypt

Egypt is a country in northeastern Africa on the Mediterranean Sea. Egypt's capital and largest city is **Cairo**. The two main geographic features of Egypt are the Nile River and the Sahara Desert. Ancient Egypt was essentially a long, narrow oasis along the river in the desert.

Egypt's ancient civilization flourished from about 3100 B.C. to 30 B.C. when Egypt became a province of the Roman Empire. Many works of art, literature, and architecture survive from ancient Egypt including huge tombs of the pharaohs, the Sphinx, the great pyramids near Cairo, and tall obelisks which inspired the Washington Monument in the United States. The ancient Egyptians developed a 365-day calendar which is the basis for the calendar we use today.

It is often said that "geography is destiny," and this was certainly true in Egypt where the Nile was the lifeblood of the country and the desert provided natural barriers to enemies permitting ancient Egyptian civilization to survive for 3,000 years, the longest in history. Ancient Egyptians had a polytheistic religion; their important gods included Ra, god of the sun and creator of life, and Osiris, god of the earth and living things. The struggle between Osiris and his evil brother Set represented the eternal struggle between good and evil.

pharaohs

Pharaohs were the kings of ancient Egypt who were worshipped as gods. They controlled strong central governments that built massive public works such as the irrigation systems that tamed the Nile's floods allowing agriculture to flourish in the desert. The Pharaohs also built the impressive temples and monuments which still stand today. Notable among Egypt's pharaohs were Ramses II (Ramses the Great) who constructed great temples and Queen Hatshepsut, the first important woman ruler in history. Cleopatra was the last queen of the thirty-one **dynasties**, or ruling families of Egypt.

As societies grew larger, **government** became necessary to provide an orderly way to make decisions, to maintain public order through police and courts, and to supply services which cannot be provided by individuals. In the hot Egyptian desert, for example, lack of water could mean starvation and death. Only government could ensure that each farmer received his fair share of water and that all farmers maintained their irrigation ditches so that the systems didn't break down. Today, governments still maintain public water systems, and they perform other functions not provided by business such as national defense and education. Major types of government have been **chiefdoms** and **monarchies** (kings & queens) based on hereditary rule, **democracies** based on rule by the people, and **dictatorships** in which one person takes control of a nation, usually with help from the military.

pyramids

Built as burial tombs for pharaohs, the pyramids are a group of large monuments in the Egyptian desert at Giza, a suburb of Cairo. They are the oldest and the only remaining examples of the Seven Wonders of the Ancient World. Without iron tools or wheeled vehicles, large numbers of workers cut, moved, and lifted millions of limestone blocks that weighed an average of 2.5 tons each. Archeological evidence indicates that the workers who built the pyramids were not slaves, but valued members of society who lived with their families in a nearby community. The age of pyramid building in Egypt extended from about 2700 B.C. to 1000 B.C.

Tombs such as the pyramids were built for the afterlife of the Pharaohs who were provided with everything they would need in the afterlife. Filled with fantastic riches, the Pharaohs' tombs were a great temptation to grave robbers who looted most of the tombs long ago.

Standing guard over the pyramids at Giza is the **Sphinx**, a great rock sculpture with the head of a pharaoh and the body of a lion. It was built about 2500 B.C.

mummification

In preparing the bodies of the pharaohs for the afterlife, skilled priests removed the vital organs, then dried and wrapped the body in strips of linen. The body of the pharaoh would be placed in an elaborate stone coffin called a sarcophagus. Eventually, ordinary Egyptians were mummified. Archeologists have even discovered an ancient Egyptian cemetery filled with mummified cats.

Priests were very important in Egyptian society, ranking just below the pharaohs. At the bottom of society were slaves and just above them were the farmers who produced Egypt's wealth. All Egyptians, including pharaohs, had an incentive for doing good during their lives; their religion said that good works were necessary to enter the afterlife.

Tutankhamen

Also known as King Tut, Tutankhamen was a pharaoh of ancient Egypt in the 1300s B.C. who died at the age of eighteen. Although his reign was not very important, he became famous in our time for the discovery of his unlooted tomb in the 1920s, the only tomb of a pharaoh to be found intact. Although he was only a minor king, his tomb contained over 5,000 objects in four rooms including a spectacular life-like mask of solid gold which covered the head and shoulders of his mummy. King Tut's tomb is one of the most important archeological discoveries of all time.

hieroglyphics

This was the ancient Egyptian system of writing that used pictures to represent words or syllables. Hieroglyphics preserved records of ancient Egyptian culture for thousands of years. Egyptians carved hieroglyphics into stone and they also wrote on **papyrus** made from a reed plant which was pressed and dried to make a paper-like material (paper gets its name from papyrus). Papyrus could be rolled onto scrolls which made written records compact and portable.

Modern people did not understand Egyptian hieroglyphics until the **Rosetta Stone** was discovered in Egypt in the late 1700s by Napoleon's armies. Carved into the Rosetta Stone was a message written in hieroglyphics along with a translation in Greek. Modern scholars understood Greek and were able to use the Greek to break the code of hieroglyphics. Because the Rosetta Stone was the key to deciphering Egyptian writing, a "Rosetta Stone" has come to mean the key to understanding any difficult problem.

Unit 4 - Ancient Greece; *the source of Western Civilization*

MAP IDENTIFICATION: Greece, Athens, Crete, Asia Minor (Turkey), Persian Empire (Iran), Alexandria, Aegean Sea

Greece

Greece is a rocky, peninsula country in southeastern Europe on the Mediterranean Sea. (A **peninsula** is a body of land surrounded on three sides by water, jutting out from a larger body of land.) Due to poor farm land, many Greeks turned to the sea and trading to make a living. Greece's earliest major culture, the **Minoan** civilization, was located on the island of **Crete**, the largest of the Greek islands. In Greek mythology, Crete was the kingdom of Minos, where the Minotaur (half man and half-bull) lived at the center of the Labyrinth (a maze). The Minoans were conquered in the 1400s B.C. by the **Myceneans** (My-SUH-nee-uns) from southern Greece. Greek mythology says it was the Myceneans and their King Agamemnon who led the Greek army in the Trojan War.

Ancient Greece was a region with city-states such as Minos, Mycenea, Athens and Sparta. (A **city-state** is a city and surrounding area which functions as an independent, self-governing nation.) Classical Greek culture developed about a thousand years after the fall of Minos and extended from about 500 B.C. to 300 B.C. The Greeks practiced polytheism and they believed their gods lived on Mount Olympus. The Greeks call their land "Hellas." Classical Greece, particularly the culture that developed in Athens, was known for its beautiful arts, architecture, science, philosophy, theater and for creating the first democracy. Classical Greece was the principal source of Western civilization.

Trojan War

Buried in the mists of the ancient past, the details of the Trojan War are vague. The war seems to have begun in about 1200 B.C. between forces from mainland Greece and the defenders of the city of Troy in **Asia Minor** (now Turkey). According to mythology, **Helen of Troy** was the most beautiful woman in the world and her kidnapping by the Trojans led to the Trojan War when the Greek army sailed to Troy to get her back. Helen's was the "face that launched a thousand ships." The Trojan War provides the backdrop for the greatest myths and poetry of the ancient Greeks.

According to myth, the Greeks used the **Trojan Horse**, a large, hollow horse made of wood, to win the Trojan War. The clever Greek hero **Odysseus** came up with the plan. The Greek army pretended to end the siege of Troy and set sail for Greece leaving the horse behind for the Trojans who took it inside the city walls. But Greek soldiers were hidden inside the horse and at night they opened the gates of Troy so the Greek army could enter the city and destroy it. Historians believe the Trojan War actually happened, but it was probably fought over control of the **Aegean Sea**, not over Helen of Troy.

The *Iliad* and the *Odyssey*

These are two epic (meaning long and heroic) poems by **Homer**, an ancient Greek poet said to be blind. The *Iliad* recounts the story of the Trojan War and the *Odyssey* tells of the adventures of Odysseus and his men during their return from the war in Troy to their home on the Greek island of Ithaca. The return trip took ten years because of obstacles placed in their path by Poseidon, god of the sea, who felt he was not properly honored by the Greeks for his help during the Trojan War. (All Greek gods had a good side and a bad side, much like the humans they resembled.)

The heroes of the *Iliad* and the *Odyssey* served as models of excellence for the ancient Greeks. In both poems, wisdom is more powerful than physical strength. Many literary critics have considered Homer to be the greatest of all poets. An odyssey now means a trip of discovery.

Iron Age

The Bronze Age was followed by the Iron Age. This is when people learned how to use the forced draft of air from a furnace or bellows to produce the high temperatures needed to extract iron from iron ore and to shape it into tools and weapons. Iron was much stronger than bronze, and iron ore was much easier to find than the tin needed to make bronze. Iron working not only meant better tools and weapons, it meant many more of them, a major technological change.

The Iron Age began in the Middle East and Greece around 1000 B.C., between the time of Greek myth and the classical Greek period. The Iron Age continues to the present day although some might say we live in the "Industrial Age" or the "Information Age."

Athens

Athens, the present day capital of Greece, was named after its ancient patron goddess, **Athena**. In the fifth century (400s) B.C., the city-state of Athens was the political and cultural center of Greece and home to important thinkers such as Socrates and Plato.

Persian Empire

Centered in present day Iran, the huge Persian Empire stretched from the Middle East to India. The Persians invaded and attempted to conquer Greece several times in the 400s B.C., but were defeated in battles including the **Battle of Marathon** and the **Battle of Salamis**.

At the Battle of Marathon, the Greeks defeated a much larger invading army of Persians and, according to legend, a Greek soldier ran nearly 26 miles from the battlefield to Athens where he died after delivering news of the victory. This legend is the basis for the modern marathon foot race.

In fighting ten years later, the people of Athens fled to the nearby island of Salamis after the Persians conquered and burned Athens. The Persian king, Xerxes, had his throne placed on a hill where he could watch his fleet of a thousand warships destroy the much smaller Greek fleet. Instead, Xerxes watched in horror as the Greeks lured his navy into a narrow strait where the smaller Greek ships outmaneuvered and rammed the larger Persian ships, sinking most of the Persian fleet. After the defeat at Salamis, Xerxes went home to Persia and the **Persian Wars** soon ended.

Pericles

A statesman named Pericles was the political leader of Athens following the Persian Wars. Although the Persians had been defeated, Persia remained a military threat. Because Athens led the Greek alliance against the Persians, other Greek city-states paid money to Athens for protection. Pericles used this income to rebuild his burned-out city and to finance the construction of magnificent new buildings including the Parthenon.

Pericles encouraged great thinkers and artists to come to Athens, and he promoted a new form of government called democracy. His rule is sometimes called the Golden Age of Greece or the **Age of Pericles**. Later, Pericles led the Athenians at the beginning of an unsuccessful war against Sparta, called the **Peloponnesian War**, but he soon died from the Plague.

democracy

Democracy is a form of government in which power lies with the people who may exercise that power directly as they did in ancient Athens where all citizens could vote on new laws. Or, power may be exercised indirectly through elected representatives as we do in the United States. Although the terms democracy and republic now have much the same meaning, originally democracy meant direct rule while republic meant representative government. The word democracy comes from Greek as do many other words in our language such as history, geography and philosophy.

The ancient Greeks valued their independence and did not consider their leaders to be gods as did the ancient Egyptians. Greek soldiers were citizens and free men. Under these circumstances it is not surprising that democracy began in Greece, although the various city-states had different forms of government at different times. In Athens, citizens were expected to participate in the government of their city-state or “polis.” Citizens, however, were a minority of the population because women, slaves, and foreign-born persons did not qualify as citizens.

Parthenon

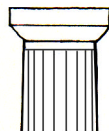
The Parthenon was built during the rule of Pericles as a temple to honor Athena, the goddess of wisdom and the patron goddess of Athens. A huge statue of Athena, covered in gold and ivory, stood inside the Parthenon.

Although the Parthenon is now in ruins, it is famed for its beauty and proportion; it is perhaps the most influential building in the history of Western architecture. It served as a model for much Greek and Roman architecture that followed and later for important buildings all over the world including the Lincoln Memorial in the United States. Like all classical Greek temples, the Parthenon was built with columns and beams which left little interior space.

The Parthenon is the main building on the **Acropolis**, a high point in Athens which was the center of Athenian life and a fortress against attack. In Greek, Acropolis means “high” (acro) “city” (polis). Our words policy, police, politics and metropolis come from the Greek word polis.

capital

Greek temples, such as the Parthenon, were constructed with columns which held up heavy temple roofs. The top portion of a column is called the capital, and the capital can help to distinguish different styles of architecture such as the **Doric, Ionic, and Corinthian** orders of classical Greek architecture. **Architecture** is a term which means the style and construction methods of a building.



Doric



Ionic



Corinthian

fine arts

Fine arts are those arts which are produced more for beauty or spiritual reasons than for practical purposes. Painting and sculpture are considered to be fine arts. The sculpture of the classical Greek period was much more realistic than the stiff, formal art of earlier eras such as the ancient Egyptians. Historians take a serious interest in art because art is a record that reflects the concerns of the people of its time, and art often survives better than other objects made by humans.

Crafts are hand-made items produced more for practical use than for beauty although many craft objects can be quite beautiful. Crafts include items such as baskets, pottery, furniture and metalwork. The **performing arts** include theater, music, and dance.

The fine arts, performing arts, and crafts were all highly developed in classical Greece.

humanism

The ancient Greeks considered human beings to be the center of existence. Unlike earlier and later periods of history that were primarily concerned with gods, religion and the afterlife, the philosophy and arts of classical Greece were concerned with the value of human beings on earth. Humanism can be seen in Greek art which portrayed the human body realistically. For the first time, we see artists signing their work which shows the importance of the individual in Greek culture.

The Greeks strived for excellence in the way they conducted their daily lives. They believed that reason was the true source of knowledge and that a wise person was the best person. This concern with human life, and the effort to improve humanity through reason, is called humanism.

Greek humanism emphasized order in daily life, nothing in excess, a balance between extremes known as “**The Golden Mean.**” In school, for example, both the body and the mind were trained. An athlete, to be considered great, had to excel at music and poetry in addition to sports.

Olympic Games

The ancient Greeks dated their years from the first Olympic Games held in 776 B.C. The Olympics were held every four years at the city-state of Olympia to honor Zeus, the king of Greek gods. During the Olympic Games, city states laid aside their differences as athletes traveled from all parts of Hellas to compete in the athletic events. The ancient Greek Olympics marked the beginning of large-scale organized sports competition.

Later, when the Roman Empire ruled Greece, the Olympic Games deteriorated and were ended in the 300s A.D. The Olympic Games were revived centuries later in the late 1800s with the goals of international cooperation and friendship. The modern Olympics include many athletic events of the ancient Greek games including foot races, the shot put, javelin throw and discus.

Sparta

The city-state of Sparta was a powerful rival of Athens. Sparta had a militaristic society in which children were taken from their families at a young age to be trained as strong soldiers, healthy mothers and dedicated citizens. The term “Spartan” has come to mean conditions which are short on luxury and meant to create discipline. Sparta needed a strong military because Spartan citizens were outnumbered by their slaves twenty to one.

When Sparta defeated Athens in the Peloponnesian War, Sparta became the strongest of the Greek city-states. The war was named after the southern region of Greece, the Peloponnese peninsula, where Sparta is located. The Peloponnese is nearly an island except for an **isthmus** (a narrow neck of land) that connects it to the Greek mainland.

Socrates

Socrates was a Greek philosopher famed for saying “the unexamined life is not worth living.” A philosopher is a person who examines life seeking wisdom or enlightenment; in ancient times philosophers were teachers. Socrates promoted the **Socratic method** of teaching which uses questions and answers as opposed to lecture. Socrates said he was the wisest of all people because he knew how little he knew.

Socrates did not leave behind written works; his philosophy was carried forward by his student, **Plato**, who is often considered the most important figure in Western philosophy. Plato’s reasoning led him to believe in a “prime mover,” a single God rather than the large collection of Greek gods on Mount Olympus. Plato established a school called The Academy, which became the first real university. Plato’s most famous student was **Aristotle** who developed the idea of the Golden Mean. Observing that humans often act in stupid and evil ways, these Greek philosophers shared the humanistic view that reason, not emotion, should rule our lives.

As an old man Socrates was condemned to death by the citizens of Athens for neglecting the gods and corrupting the morals of the young. Many historians agree that Socrates actually was made a scapegoat for the decline of Athens after it was defeated by Sparta in the Peloponnesian War.

Alexander the Great

Although the Golden Age of classical Greece was over, Greece would once again take the center stage of history with the conquests of Alexander the Great, a young man from the mountainous northern region of Greece called Macedonia. When Alexander was a boy, his tutor was the philosopher Aristotle. His father was the successful general, Philip of Macedon, who succeeded in conquering all of Greece in 322 B.C., bringing an end to the independence of the Greek city-states. When his father died, Alexander took control of Greece at the age of twenty, but he wanted more. By combining the effective Greek **infantry** (foot soldiers) with **cavalry** (mounted soldiers), Alexander succeeded in conquering much of the ancient world extending his empire all the way to India. In the process, he defeated Greece's old enemy, the Persian Empire, which had repeatedly tried and failed to conquer Greece during the Persian Wars.

In just eleven years Alexander had conquered the known world and had never lost a battle, but he became sick with a fever (possibly malaria) and died at the age of thirty-two. His empire fell apart after his death and was divided among his top generals. Alexander's great achievement was the blending of cultures from Greece and Asia which led to Hellenistic civilization.

Hellenistic civilization

After Alexander the Great spread Greek civilization to the east, a gradual blending of Eastern and Western cultures occurred. Alexander encouraged this blending by marrying an Asian wife and encouraging his soldiers to do the same. After his death, a new culture emerged known as the Hellenistic world, a blend of Greek, Persian, Egyptian and Indian influences which would flourish for centuries and strongly influence the later Roman Empire, a major example of cultural diffusion. Art of the Hellenistic age became more elaborate and emotional than the pure and balanced art of the Classical Greek period. Hellenistic science made great advances; one scholar even accurately calculated the circumference of the Earth.

Alexandria, Egypt was one of many cities founded by, and named after, Alexander the Great. A port city located where the Nile River delta empties into the Mediterranean Sea, Alexandria became the center of learning of the Hellenistic world. It was the site of one the Seven Wonders of the Ancient World, the Lighthouse of Alexandria, and it was the location of the great Library of Alexandria which contained the accumulated knowledge of the ancient world in an estimated one million papyrus scrolls. Unfortunately, this vast store of knowledge was later destroyed by invaders, perhaps by the Roman ruler Julius Caesar or possibly by Muslims.

Ptolemy

Ptolemy was an ancient Greek astronomer living in Alexandria, Egypt who, like many people of his time, believed that Earth was the center of the universe. He became famous for developing an elaborate mathematical system which calculated how each planet traveled in its own sphere around the Earth. It was brilliant mathematics but faulty astronomy. Nonetheless, the system of Ptolemy was accepted by astronomers for nearly 1500 years, and it was adopted as law by the Roman Catholic Church.

Ptolemy was also a geographer who mapped the known world using a grid system for locating places on the earth which became the system of latitude and longitude that we use today.

the classical world

The age of ancient history dominated by the cultures of Greece and Rome has been so important to the development of Western Civilization that this period has been given several names. Stretching from about 500 B.C. to about 500 A.D., the classical world is sometimes called **classical antiquity** or the **classical period**, or the **Greco-Roman World**.

empire-building

Empire-building is the tendency of rulers to try to increase their power and possessions. The modern German philosopher Friedrich Nietzsche (Nee'-chuh) said everyone has such a desire, and he called it "**the will to power**." Empire-building has been a source of much death and destruction throughout human history, but it has also been one of the main engines of historical change as both the conquered and the conqueror are changed forever by the meeting of different cultures. Like all natural systems, such as plants or human life, empires follow a pattern of growth, flowering, and decline. (Is the United States an empire? Is it growing, flowering, or declining?)

The term empire-building is used today to describe people who try to increase their power and prestige by expanding business or government organizations. Bill Gates of Microsoft Corporation is a modern day empire-builder in the field of computer technology.

Unit 5 - Ancient China and Asia; *the source of Eastern Civilization* (with additional history and geography concepts)

MAP IDENTIFICATION: The Tropics, Arctic and Antarctic regions, Asia, Ural Mountains, Japan, Far East, Southeast Asia, India

primary sources and secondary sources

We learn about past civilizations from historians. But, where do historians get their information? Usually, they study primary sources which are sources created at about the same time as the event being studied, often by people involved in the event. Examples of primary sources include government records, diaries, letters, speeches and, more recently, newspaper articles and television reports.

Secondary sources, on the other hand, are sources which are created after the event by people not involved in the event. Examples of secondary sources include encyclopedias, textbooks and the *Student's Friend*.

As historians try to understand past civilizations, they often look for elements of **continuity and change**; what is new in the culture, and what has stayed the same? For example, when the Macedonians conquered Greece, the Greek city-states lost their independence, but much of Greek culture remained unchanged. Although government changed, architecture and the Olympics continued on. When we look at a civilization at a particular time in history, we usually find many elements that stay the same while others are changing.

The Tropics

Located near the **equator**, the tropics are the warmest areas of the earth. The **Tropic of Cancer** is an imaginary line that circles Earth at 23-1/2 degrees north latitude which is the northernmost point reached by the sun during our summer; the sun is directly above the Tropic of Cancer on that day, the summer solstice, the day with the most daylight during our year.

The **Tropic of Capricorn** is an imaginary line that circles Earth at 23-1/2 degrees south latitude, which is the farthest point south reached by the sun during our winter; the sun is directly above the Tropic of Capricorn on that day, the winter solstice, the shortest day of our year.

Arctic and Antarctic regions

Located near Earth's poles, these are the coldest areas of the earth. The **Arctic Circle** is an imaginary line that circles Earth at 66 1/2 degrees north latitude. North of this line is the "Land of the Midnight Sun," where the sun never sets on the summer solstice. At the very top of the earth is the North Pole where Santa Claus lives.

The **Antarctic Circle** is an imaginary line that circles Earth at 66 1/2 degrees south latitude. Its best-known inhabitants are penguins.

Those areas of the earth which are not included in the Tropics or the Arctic or Antarctic regions are called the **temperate zones**, meaning areas where temperatures and climate are more moderate. The U.S. and most of Europe and Asia are located in the northern temperate zone.

hemisphere

A hemisphere is any half of Earth's surface; the term comes from the Greek word for half a sphere. The equator (zero degrees latitude) divides Earth into the Northern Hemisphere and the Southern Hemisphere. The dividing line between the Eastern and Western hemispheres is not so well-defined, but it is often placed at the **Prime Meridian** (zero degrees longitude) or at 20 degrees west longitude.

North and South America and surrounding waters are generally considered to be in the Western Hemisphere, or the "New World." The continents of Europe, Africa, Australia, and Asia are considered to be in the Eastern hemisphere. The "Old World" usually refers to Europe.

Asia

Asia is the world's largest continent, sharing a land mass with Europe which lies to the west. The **Ural Mountains** of Russia are considered to be the dividing line between Asia and Europe. Together, Asia and Europe form the land mass of Eurasia.

Asia was the site of two of the world's earliest civilizations in China and India. Today Asia has three-fifths of the world's population and the two most populous countries in the world, again China and India. Asia is often referred to as the **Orient**, meaning the East.

Because Asia is so huge, it has been subdivided into several regions. On the western side of Asia are the Middle East (or Near East), Asia Minor (present day Turkey), and central Russia. The Indian subcontinent is on the south. On the eastern side of Asia are the Far East and Southeast Asia.

Japan

Japan is an island nation in the North Pacific Ocean off the eastern coast of Asia. The Japanese islands were formed by volcanic action at the edge of tectonic plates. Japan lies on the so-called “ring of fire,” a belt of volcanoes and earthquakes that nearly encircle the Pacific plate.

Because the rising sun strikes Japan before the Asian mainland, Japan is known as the “land of the rising sun.” The modern Japanese flag features a large red circle symbolizing the sun.

Japan’s geographic features include four main islands and thousands of smaller islands that enclose the Sea of Japan. Mount Fuji, a picturesque inactive volcano and Japan’s highest mountain, is located about 60 miles from **Tokyo**, Japan’s crowded and busy capital city.

Japan’s early culture was strongly influenced by that of China, 500 miles to the west. The modern day population density of Japan is very high. Although lacking in natural resources, Japan is a major world economic power ranked second only to the United States in total economic output.

East Asia

East Asia is a term applied to the region on the eastern edge of Asia, south of Russia and near the Pacific Ocean. This region includes the countries of Japan, China, Mongolia and Korea. East Asia is also called the Far East.

Southeast Asia

This is another geographical subdivision of Asia which identifies a region lying generally to the south of the Far Eastern countries. Southeast Asia includes the countries of Vietnam, Thailand, Indonesia, and the Philippines.

India

Much of India is a triangular-shaped peninsula that juts into the Indian Ocean. It is bordered on the northeast by the Himalaya mountains and on the northwest by the nation of **Pakistan**. Today India is the second most populous country in the world after China. The capital of India is New Delhi. India is the world’s largest democracy.

Being a large and varied country, India has many ethnic groups and languages. After many years as a British colony, India has adopted English as one of its official languages.

India was the home of one of the world’s earliest civilizations which developed along the **Indus River Valley** in western India. Dating from 2500 B.C., the Indus Valley civilization lasted for more than 1,000 years. It was a Bronze Age culture existing at the same time as the ancient civilizations of Mesopotamia and Egypt.

India had a big impact on the world as the birthplace of two major world religions, Hinduism and Buddhism. India and nearby countries form a region known as the **Indian subcontinent** or the **Asian subcontinent** or **Southern Asia**. Economically, this is one of the poorer regions of the world.

Hinduism

Hinduism is the major religion of India. The word Hindu comes from the Indian word for river, referring to the Indus River. Hindus seek a state of spiritual perfection in which material possessions are unimportant.

Hindus worship a God called Brahman which can take many forms. People worship the form of Brahman which pleases them most, such as the goddess Kali which represents the life cycle of birth and destruction, or the elephant-headed god Ganesh. Hindus believe in reincarnation, meaning the soul never dies and may be reborn again in a different body, a process which can continue for thousands of years. Hindus believe that karma - all of the actions of a person’s life - will affect the person’s fate in the next life. Because Hindus believe cows are sacred, they do not eat beef.

Hinduism has traditionally been associated with the **caste system** in India. Under the caste system, people are born into permanent social classes for life. There are four main castes with complicated rules of behavior. A fifth group, the Untouchables, is considered outside the caste system; they perform the least desirable jobs such as cleaning toilets. Some upper caste people feel they will be polluted by the mere touch of an Untouchable. Although discrimination against Untouchables is now prohibited by the Indian constitution, **discrimination** continues, especially in rural areas. (Discrimination means treating a group of people unfairly.)

Hinduism strongly influenced the religion of Buddhism which developed later in India and Hinduism was, in turn, changed by Buddhism.

Map Identification: Himalayas, China

Buddhism

Buddhism is a major world religion that began in India and spread to much of Asia. By following a path of spiritual and physical discipline, Buddhists hope to eliminate their attachment to worldly things and achieve a state of complete peace called Nirvana.

Buddhism was founded by the **Buddha**, originally a prince named Gautama who lived in India several hundred years before Christ. He was troubled by the question, “Why is there so much suffering in the world?” At the age of 29, he left his wife and infant son to become a wandering monk seeking answers to his question. After six years of solitary searching, he believed he found a way to end suffering and he began to teach. His followers called him “the enlightened one.”

Although Buddhism began in India, it spread to the east and declined in India. Buddhists are now found in the greatest numbers in East and Southeast Asia. Many statues of the Buddha, large and small, can be found throughout Asia. Buddhist monks with their shaven heads and colorful robes are a common sight in many Asian countries.

Himalayas

The Himalayas are a mountain range of Asia that extends through India, China, Tibet and Nepal; they contain the world’s highest mountains including **Mount Everest**. The Himalayas were long a barrier separating India from China. The Himalayas were formed by the collision of the Indian plate and the Asian plate. Because the two plates are still pushing together, Mount Everest is growing a centimeter taller every year. While the Himalayas lie to the northeast of the Indian subcontinent, the **Hindu Kush** mountains lie to the northwest.

China

With nearly one-fourth of the world’s population, China is today the most populous country in the world. It is third largest in land size after Russia and Canada. Like ancient Mesopotamia, Egypt, and India, China’s first civilization developed along a river valley, the Yellow River which the Chinese call the **Huang Ho**. The world’s second oldest known agriculture developed in China. Chinese civilization grew in relative isolation due to physical barriers and long distances that separated it from India, the Middle East and the Mediterranean. The Chinese had the greatest empire on earth between the time of Alexander the Great and the height of the Roman Empire although few in the Western world were even aware it existed.

The Chinese have long believed in a philosophy that views life as being composed of two opposite but complimentary principles called **yin and yang** which combine to form completeness or a whole. Yin includes the principals of earth, moon, cold, wet and female while yang includes sky, sun, warm, dry and male. This is the symbol of yin and yang:



Confucianism

Not a religion, Confucianism is system of ethics or a philosophy founded on the teachings of the Chinese philosopher Confucius who lived during a time of constant warfare among feudal lords in China. He tried to return harmony to China with a code of conduct based on high moral ideals. Rulers should lead by good example, he said, not through power and harsh laws. As with Socrates in Greece, Confucius did not write down his teachings; they were recorded by his followers.

Confucianism has strongly influenced the culture of China; it places a high value on learning and tradition, and it stresses family relationships including honoring ancestors. Confucianism developed during the fifth century B.C., a notable century which also saw the development of Buddhism in India and Classical Greek culture in Europe.

The First Emperor

China became a country with the reign of the First Emperor. His power came from a large irrigation system established in his kingdom, the Qin (pronounced CHIN) region of western China. (Qin is sometimes spelled Ch’in.) With this agricultural wealth he raised a strong army and spent twenty years ruthlessly conquering China’s many warring states and uniting China, proclaiming himself First Emperor in 221 B.C. Thus, it was The First Emperor, Qin Shi Huangdi, who created China, the world’s oldest country, now over two thousand years old. After unifying China, the First Emperor standardized the Chinese language, money, and road system. He built the Great Wall of China and the terra cotta army, but he also burned books and brutally eliminated all those who disagreed with him.

Although the **Qin Dynasty** lasted for only fifteen years before the First Emperor killed himself by accidental poisoning, the Qin Dynasty transformed a collection of independent states into a country and gave the country its name.

terra-cotta army

Terra-cotta is the brownish-orange pottery used today to make flower pots. As part of his tomb, the First Emperor of China buried a terra-cotta army of 6,000 life-size soldiers to protect him for eternity. The largest of the pits contained sculptures of the infantry and a second pit held the cavalry complete with life-size horses, all arranged in battle formation. Each of the terra-cotta soldiers was modeled after an actual soldier of the emperor's army, and the sculptures were painted to resemble the real person.

One of the great archeological finds of the twentieth century, the terra cotta army was uncovered accidentally in 1974 by a farmer digging a well. It provided a wealth of new information about ancient Chinese culture including military tactics, weapons, clothing, technology, and the various ethnic groups included in the Qin Empire.

Great Wall of China

Ranging from 20 to 50 feet tall with a wide brick road on the top, the Great Wall extends for 1,500 miles across northern China. The First Emperor ordered that a number of individual walls be joined together to form one great stone wall to defend the Chinese border against attack from the north. Hundreds of thousands of laborers worked for years on the wall; many workers died under the harsh conditions, and their bodies were used as fill inside the wall.

Gates in the wall became centers of trade with the northern nomadic peoples who lived outside the wall. The Great Wall has been repaired and rebuilt a number of times over the centuries. It is said to be the only man-made object visible from outer space, and today the Great Wall is a favorite destination for visitors to The People's Republic of China.

Mandate from Heaven

Chinese emperors claimed to rule with the approval of God, a Mandate from Heaven. If trouble developed in the empire - droughts or military defeats, for example - people might say that the emperor had lost his Mandate from Heaven and the emperor could be overthrown.

Han Dynasty

The Qin Dynasty was followed by the Han Dynasty which lasted from about 200 B.C. to 200 A.D. At the same time the Roman Empire was reaching the height of its power in Europe, the Han Dynasty reached its peak in China. The 400-year reign of the Han Dynasty was so successful that the Chinese still call themselves "the Han people."

The Han rulers increased China's size and power and set up a **civil service** system with well-educated officials to run the large Chinese empire. Accomplishments of the Han Dynasty included trade with the west over "the Silk Road," an accurate yearly calendar, water clocks, the magnetic compass, and the invention of paper. When the Han empire disintegrated, China was thrown into disorder for nearly four centuries.

The Silk Road

In ancient times the Chinese were the only people who knew how to raise silkworms and weave silk. Chinese silk was a valuable trade item worth its weight in gold in Rome. With silk heaped high on their camels, merchants headed west through China on what became known as the Silk Road, traveling to India, Persia, and as far as the Roman provinces along the Mediterranean, a torturous journey of some 4,000 miles. In addition to an appetite for silk, Romans acquired a taste for spices from Asia, a taste that would later send Christopher Columbus on his voyages of discovery.

The Silk Road was a two-way street. Silk, spices and other Asian goods such as jade and bronze were traded for Western goods which flowed back along the Silk Road to China. Imports from the west to China included gold, silver, glass, powerful horses, new foods, and the religion of Buddhism. The Silk Road was a great channel of cultural diffusion between the two sides of the immense land mass of Eurasia.

When the Chinese encountered Roman culture, they had their first contact with a civilization they considered as rich as their own. This was also the civilization that eventually would end the Chinese monopoly on silk. In the 500s A.D., an eastern Roman emperor sent two monks to China who smuggled silkworm eggs out of China in their walking sticks.

Unit 6 - Ancient Rome; *organization and disintegration*

MAP IDENTIFICATION: Europe, Italy, Rome, Roman Empire, Carthage, Alps, Constantinople (Istanbul)

Europe

The continent of Europe is a large peninsula of Eurasia. Europe is sometimes called a “peninsula of peninsulas.” The Ural Mountains of Russia are considered to be the dividing line between Europe and Asia. Western civilization originated in southern Europe - in ancient Greece and Rome - and our culture in the United States is based largely on European culture.

Rome

Rome is the present day capital of **Italy**, seat of the Roman Catholic Church and one of the world’s great centers of art, history and religion. According to legend, Rome was founded in 753 B.C. by two orphan brothers, Romulus and Remus, who were raised by a she wolf. Rome was only a small town when Athens was at the height of its glory, but Rome became a strong city-state at about the time of Alexander the Great. Rome was the capital of the Roman Republic (4th to 1st century B.C.) and the Roman Empire (1st century B.C. to 5th century A.D.). The empire completely encircled the Mediterranean Sea, extending from the Middle East to the British Isles.

Rome is centrally located in Italy and Italy is centrally located in the Mediterranean, making it a good location from which to build a Mediterranean empire. Due to Rome’s position at the center of the empire, it was said, “All roads lead to Rome” Because of its geography, Rome is referred to as the “City of Seven Hills.” Its most famous landmark is the Colosseum. A thousand years after the fall of the Roman Empire, Rome again became important as a leading center of the Renaissance which helped Rome to earn the title of “The Eternal City.”

Roman Empire

Covering territory of 40 modern countries, the Roman Empire was the first Western superpower. It began as a small settlement on the Tiber River, grew to include the Italian peninsula, then spread to all lands surrounding the Mediterranean Sea and to much of Europe. At first, Rome was ruled by kings; then, about 500 B.C., the Roman Republic was established with a Senate which every year chose two of its members to serve as co-rulers, or consuls. Later, during a time of turmoil in the republic, Julius Caesar took control of the government and was proclaimed dictator for life. His successors took the title of emperor.

Rome grew to its greatest size during the first two centuries of the empire when Rome was mostly at peace. Conquered peoples were not made slaves, but were welcomed as trading partners and contributing members of the empire. The Roman Empire was known for its extensive international trade and for its organizational genius including a well-developed legal system and a strong central government that produced massive public works such as roads, government buildings and **aqueducts** (water transport structures). Romans adopted Hellenistic culture; their gods resembled those of the Greeks and their artists copied the work of Greek sculptors. Christianity was born in the Roman Empire, eventually becoming the official religion.

As the years passed, the Roman Empire weakened, was divided into two parts, and eventually fell to barbarian invaders. Perhaps the two greatest contributions of the Roman Empire were its legal system and Christianity.

Carthage

Carthage was an ancient city in north Africa and a powerful rival of Rome. From 264-146 B.C., Carthage and the Roman Republic fought three **Punic Wars**. Cato, a Roman politician ended all of his speeches in the Senate with the words, “Carthage must be destroyed.” In the third and final Punic War, Roman armies took Cato’s advice and burned Carthage to the ground, plowed under the remains and salted the furrows so nothing would grow there again.

Hannibal

Hannibal was a brilliant general from Carthage who attempted to conquer Rome during the second Punic War by invading Italy from the north. Hannibal led an army of 100,000 men, supported by war elephants, from Spain through the **Alps** into Italy, a troop movement considered one of the greatest in history. Hannibal won several victories and was threatening Rome when Roman armies attacked Carthage, forcing Hannibal to return to protect his homeland. Following a later defeat in a battle at sea, Hannibal poisoned himself rather than become a prisoner of the Romans.

Julius Caesar

Julius Caesar is one of the best-known historical figures of all time. He was a successful general who gained power from military victories that extended Roman rule over the province of **Gaul** (present-day France). Fearing his growing strength, the Senate ordered Caesar to disband his army, but Caesar refused. Civil war broke out when Caesar boldly crossed the Rubicon River in northern Italy with his Roman legion (a large military unit) and headed toward Rome. Caesar won the civil war and made himself dictator for life in 48 B.C., thus ending the Roman Republic which had lasted for over 400 years. "Crossing the Rubicon" is now an expression which means taking a dangerous and irreversible step. On a later campaign in Asia, Caesar reported his victory to the Senate with the few words, "I came, I saw, I conquered." In Latin the words are "veni, vidi, vici."

Caesar was assassinated on the Ides of March (March 15th) in 44 B.C. by his friend **Brutus** and other senators opposed to Caesar's dictatorship. As Brutus stabbed him, Caesar is said to have uttered the words, "Et tu Brute?" ("Even you, Brutus?"). This phrase was later made famous in Shakespeare's play, *Julius Caesar*. Brutus and his fellow assassins wanted to end Caesar's dictatorship so Rome could return to being a republic. It didn't. Although Shakespeare portrayed Caesar as an arrogant tyrant, others give Caesar credit for trying to restore order at a time when Rome's republican government was no longer functioning effectively. Julius Caesar was responsible for adoption of the 12-month calendar we use today, and the month of July is named after him.

Cleopatra

Cleopatra is famous as the last pharaoh of Egypt and for her love affairs with two of the most powerful men of the Roman world. Descended from one of Alexander the Great's generals, Cleopatra became queen of Egypt when she was seventeen years old, sharing power with her younger brother. Later, her brother took control and drove Cleopatra from Egypt. When Julius Caesar met Cleopatra, he fell in love with her and helped her overthrow her brother to become sole ruler of Egypt. She went with Caesar to Rome and became his mistress before returning to Egypt.

After Caesar was assassinated, and civil war broke out again, two of Caesar's supporters took control of the Roman Empire, **Octavian** in the west and **Mark Antony** in the east. When Antony met Cleopatra, he too fell in love with her and went to live with her in Egypt. Back in Rome, Octavian (the adopted son of Julius Caesar) declared war on Antony and Cleopatra, and he eventually defeated their combined military forces. Hearing a false report that Cleopatra had committed suicide, Antony killed himself. After his death, Cleopatra killed herself, reportedly by letting an asp - a poisonous snake - bite her (although some say she took poison). After her death, Egypt became a province of the Roman Empire, ending the 3,000 year reign of the pharaohs. Much later, the romance between Antony and Cleopatra became the basis for Shakespeare's play *Antony and Cleopatra*.

Augustus Caesar

After he defeated the combined armies and navies of Antony and Cleopatra, Octavian became sole ruler of Rome. He took the name Augustus, which means "Exalted One," and he proclaimed himself Rome's first emperor. He and later emperors viewed themselves as gods and required their subjects to do the same. Augustus quietly stripped the Senate of much of its power, turning Rome into an empire disguised as a republic.

The rule of Augustus ended nearly a century of political unrest in the Roman world, and the empire enjoyed peace, prosperity and a golden age of literature. The month of August is named after Augustus, and Jesus was born during his reign.

Pax Romana

Pax Romana is Latin for "the Roman Peace," a period which began with Augustus and lasted for 200 years, when Roman rule brought peace, order, and prosperity to an empire stretching from the Euphrates River in the east to Britain in the west, an area equal in size to the continental United States. From one end of the empire to the other, Romans were protected by a uniform system of law. Roman judges were required to weigh the evidence fairly, and accused persons were considered innocent until proven guilty, principles later adopted by our legal system in the United States. Roman law was one of the greatest achievements of the empire.

Latin

Latin was the language of ancient Rome which spread throughout the empire. Later, during the Middle Ages and Renaissance, Latin was the language of the Roman Catholic Church and the universal language of educated people. Even in modern English, many scientific and legal terms are derived from Latin, such as *habeas corpus*, *Homo Sapiens* and *Tyrannosaurus Rex*. The modern languages of Spanish, French, Italian and Portuguese are called **Romance languages** because they are derived from the Latin language of the Roman Empire.

Phoenician alphabet

Carthage in North Africa was one of the colonies established by brave sea traders from the ancient country of Phoenicia, located at the eastern end of the Mediterranean Sea. From their travels, the Phoenicians learned about Sumerian cuneiform and Egyptian hieroglyphics. The Phoenicians developed an alphabet of 22 letters, with no vowels, which they used to record their business transactions. The alphabet differed from all other known writing systems in that the letters stood for individual sounds, not for whole words or syllables like cuneiform or hieroglyphics. Because the alphabet was simpler and more precise than picture writing, it spread to many cultures. The Phoenician alphabet was adopted by the Greeks who added vowels, and then by the Romans who modified the letters to become the alphabet we use today.

arch

An arch is a curved opening that spans a doorway, window or other space. The arch was a great architectural achievement which made it possible to span much greater distances than the column-and-beam architecture of the Egyptians and Greeks. The arch was adopted on a large scale by the Romans who used it to build impressive structures such as palaces, arenas and baths. Arches built side-by-side could create aqueducts; arches placed in front of one another could form large “vaulted” ceilings, and arches arranged in a circular pattern created domes.

The Romans also developed the use of concrete as a construction material. With large interior spaces made possible by the arch and concrete, public buildings could now be used for practical purposes, not just as shrines and temples. The type of arch is sometimes used to distinguish one style of architecture from another. For example, Romanesque buildings usually have round arches while the Gothic architecture of the Middle Ages used pointed arches.

Christianity

Christianity is a major world religion based on the teachings of Judaism from the Old Testament of the Bible and on the life and teachings of Jesus Christ who was a Jewish holy man born in the Middle East during the reign of Augustus Caesar. Jesus encouraged his followers to be kind to others and to prepare for a day of judgment by giving up sin. Christians believe that all those who accept Jesus may attain everlasting life in God’s kingdom in heaven.

Jesus’s followers believed he was the Messiah (leader and savior) sent by God. Jewish leaders disagreed and placed Jesus on trial for claiming to be the son of God. Roman officials ordered Jesus to be executed by nailing his body to a cross.

Jesus had said, “Render unto Caesar the things which are Caesar’s, and unto God the things that are God’s.” Nonetheless, Christianity was declared illegal, and Christians were persecuted in the Roman Empire because they refused to worship the Roman emperors as gods.

Our calendar is based on the birth of Christ; all years before the Christian era are designated B.C. (before Christ) and those after the birth of Christ are designated A.D., an abbreviation for the Latin term *anno Domini* which means “in the year of the Lord.” Some historians now refer to B.C. as B.C.E. (before the common era) and refer to A.D. as C.E. (common era).

Nero

Born to the family of the Caesars, Nero and Caligula are considered to be two of Rome’s “bad emperors.” Cruel and insane, Caligula murdered many of his relatives, had people tortured and killed while he ate dinner and appointed his favorite horse to the Roman Senate to humiliate the senators. After being assassinated by his own guard, Caligula was succeeded by Nero, the great great grandson of Augustus.

Although historians have their doubts, legend says that Nero caused a great fire which destroyed two-thirds of the city of Rome. It is said Nero played a stringed instrument while watching Rome burn. To say that someone is “fiddling while Rome burns” means that the person is unconcerned in the midst of disaster. Historians believe it is true that Nero persecuted Christians, blaming them for the great fire in Rome, that he had his wife and mother killed, and that he kicked his pregnant mistress to death. Nero died by taking his own life. Nero and Caligula illustrate the kinds of problems which can result when leaders are chosen based on royal birth.

Pompeii

Pompeii, on the western coast of Italy, was a resort city for wealthy citizens of the Roman Empire until 79 A.D. when it was buried in ash and cinders by the eruption of **Mount Vesuvius**, a nearby volcano. Although most inhabitants fled the city before it was buried, the remains of more than 2,000 people have been found in the ruins. The city lay undisturbed for more than 1500 years until excavations in the mid-1700s uncovered the public buildings, temples, shops, and private homes of Pompeii. Pompeii provides an unequalled glimpse into daily life during the Roman Empire.

Colosseum

The Colosseum is a great arena of ancient Rome which seated 50,000 spectators. Bloody contests were staged in the Colosseum for the entertainment of Roman citizens. Using a variety of weapons, gladiators fought wild beasts and each other to the death. Although the Colosseum is now in ruins, it remains impressive. It is the best-known structure of the Roman Empire and the symbol of the present day city of Rome. The Colosseum also symbolizes the **decadence**, or moral decay, of the later years of the Roman Empire.

“Bread and circuses” is a phrase that describes the policy used by Roman emperors to keep their people happy by providing free food (bread, wine, bacon, etc.) and entertainment such as the bloodthirsty spectacles held at the Colosseum. The phrase has come to mean government policies that seek to divert attention from problems which might cause public unrest.

Constantine the Great

By the fourth century A.D., the Roman Empire was in a state of confusion; it was running short of money and facing increasing pressure from barbarians pushing in from the borders. In one 50-year period, 26 emperors reigned and only one of them died of natural causes. At about this time a strong general named Constantine took control of the empire and tried to stop its deterioration. He is remembered as Constantine the Great, one of Rome’s “good emperors.” Although Christianity had long been outlawed and Christians persecuted, Constantine legalized Christianity and made it the official religion of the Roman Empire in place of the pantheon of Roman gods and goddesses. Thus, the Christian church became the *Roman Catholic Church*. The Romans spread Christianity throughout the empire thereby making Christianity a central feature of Western civilization.

Constantine also ended the blood sports in the Colosseum, and he established

Constantinople as the capital of the stronger eastern part of the Roman Empire, while Rome remained capital of the weakened western part of the empire. Constantine ruled over both parts of the empire from Constantinople which was strategically located on the **Bosporus**, the strait that connects the Black Sea to the Mediterranean. Today, Constantinople is called **Istanbul**, Turkey’s largest city.

barbarians

Despite the best efforts of Constantine, the Roman Empire continued to decline after his death as barbarians made repeated attacks against the empire. Barbarians were nomadic warrior tribes considered by the Romans to be ignorant and culturally inferior. They included the **Huns** who invaded Europe from western Asia, pushing other barbarian tribes ahead of them. Their infamous leader, **Atilla the Hun**, was called the “Scourge of God.” The **Goths** from central Europe sacked Rome in 410 A.D. The **Vandals** from northern Europe plundered Rome in 455; they were so destructive that the term vandalism comes from their name. Near the end, the Roman Empire was in chaos, hiring barbarians to fight other barbarians.

Fall of Rome

The collapse of the Roman Empire in the fifth century (400s) is considered to be the end of ancient times and the beginning of the Middle Ages. With the fall of Rome, civilization came to an end in Europe for several centuries.

Although the Roman Empire had been in decline for a very long time, the year 476 A.D. is usually given as the date for the Fall of Rome; this is when the last emperor of the western Roman Empire gave up power to the barbarians. It should be remembered, however, that the eastern Roman Empire - later called the Byzantine Empire - lived on for another thousand years. Historians have long debated the causes of the Fall of Rome. Factors leading to the Fall included the decline of agriculture, reliance on mercenary soldiers, heavy taxes needed to maintain the empire, weak and corrupt emperors, a decadent upper class devoted to luxury and greed and probably boredom. Perhaps the more important question is not why Rome fell, but why it lasted so long.

the Dialectic in history

Georg Hegel was a modern German philosopher of the 1800s who believed that history is constantly involved in a process of change, and that these changes gradually move toward greater freedom. Hegel said historical progress is the result of a “dialectic,” or the conflict of opposite ideas. Examples include freedom versus slavery and civilization versus barbarism.

Hegel saw a pattern in history which has been described as **thesis, antithesis, and synthesis**. According to Hegel, any existing historical condition, called the thesis, is always imperfect and gives rise to its opposite idea, the antithesis. As a result of conflict between the two, a third condition arises, the synthesis, which combines the most useful parts of the thesis and antithesis. This synthesis becomes the new historical condition or thesis, which will generate a new antithesis, and so on. In this way, according to Hegel, history advances over time.

Unit 7 - The Middle Ages; *Europe from chaos to dominance*

MAP: Byzantine Empire, Scandinavia, Normandy, France, England, the Holy Land

Middle Ages

The Fall of Rome marks the end of ancient times and the beginning of the Middle Ages, a period of a thousand years between ancient and modern times. The Middle Ages are also termed the **Medieval** period. The first few centuries of the Middle Ages are often called the **Dark Ages** because Europe was in chaos due to the loss of civilization and widespread warfare among barbarian tribes. Civilization gradually returned to Europe during the middle centuries of the Middle Ages. By the end of the period, around 1500, magnificent Gothic cathedrals had been built, the modern nations of England and France had been born, and Europe had become the dominant region of the world.

Byzantine Empire

Although the Roman Empire fell apart in the west, the eastern portion survived for another thousand years under a new name, the Byzantine Empire. The Byzantine emperors served as head of both the Christian church and the state. With its capital at Constantinople, the Byzantine Empire included Greece and Asia Minor (present day Turkey) and Byzantine culture extended into Russia. Today, this region is home to the **Eastern Orthodox** branch of the Christian Church.

The Byzantine Empire is known for a decorative style of art that featured **mosaics**, and for an extensive set of laws established by the Emperor Justinian. The **Code of Justinian** brought together all of the laws of the Roman Empire, and it became the basis for modern legal systems in Europe. Today, the word byzantine is often applied to a set of complicated laws or rules.

Justinian also increased the size of the Byzantine Empire, and he constructed the best-known example of Byzantine architecture, the church of the **Aya Sophia** (or Hagia Sofia) in Constantinople. The Byzantine Empire ended in the 1400s when it was conquered by the Muslim **Ottoman Empire** of Turkey which changed the name of Constantinople to Istanbul.

Germanic tribes

Although the Romans called them barbarians, Germanic-speaking tribes defeated the Romans because they possessed a vitality that the Romans had lost. But, the Germanic tribes were illiterate, and warriors were loyal only to their local chieftains which made the development of nations or empires impossible. This was a time of much warfare between competing tribes and bands; the populations of cities declined as people fled to the countryside seeking safety from the fighting.

There was a great movement of people across the unsettled landscape of Europe. The loss of writing, cities and government organization meant that civilization had ended in Europe. As time went on, however, the barbarian chiefs would become nobles and kings, and these Germanic tribes would evolve into the powerful kingdoms that ruled Europe during the Middle Ages.

Roman Catholic Church

The Roman Catholic Church was the first Christian church and is now one of three main branches of Christianity, the other two being the Eastern Orthodox and the Protestant churches, both of which broke away from the Catholic church.

The Roman Catholic Church was one institution from Roman times that did not break down. People found refuge from the chaos of the Dark Ages in Catholic **monasteries** (self-contained religious communities) which operated schools and libraries and copied books which helped to keep learning alive. The Christian church was the strongest civilizing force in western Europe during the Middle Ages, becoming so important that Europe during this period was called **Christendom**.

Under Pope Gregory I (590-604), the power of Catholic popes grew which would lead to bitter contests between the church and kings for power. Pope Gregory also made **Gregorian Chant**, or plainsong, part of the worship service of the Catholic Church.

Charlemagne

We begin to see civilization returning to Europe with the reign of Charlemagne, king of a Germanic people called the Franks who gave France its name. Charlemagne, or Charles the Great, established a large empire in central Europe. After his armies aided the pope, Charlemagne was crowned Holy Roman Emperor by the pope in the year 800. The **Holy Roman Empire** was an attempt to revive the Western Roman Empire, but it seldom extended beyond the region of Germany.

Despite his success as a warrior, Charlemagne is best remembered for his love of learning. He surrounded himself with scholars and he encouraged monks in monasteries to copy literature from the Greeks and Romans. Without his help, much of what we know of the classical world would have been lost forever. Some historians even credit Charlemagne with preserving Western civilization.

Vikings

Vikings were fierce warriors, traders and raiders from **Scandinavia**, present day Norway, Sweden and Denmark. During the 700s to 900s, Vikings terrorized much of coastal Europe and traveled far inland by river to loot and destroy. They conquered northern England and Normandy (land of the Northmen) in northern France where they established new societies.

Vikings traveled the treacherous Atlantic Ocean in excellent boats which could also navigate shallow rivers. A Viking named **Leif Ericson** was probably the first European explorer to discover North America. The Vikings brought the adventurous spirit of ocean exploration to Europe.

Norman Conquest

The Duke of Normandy was a descendent of the Viking raiders who settled in northern France. In 1066, his army invaded England and defeated an English army led by King Harold who died from an enemy arrow in the eye. With this victory at the **Battle of Hastings**, the French Duke of Normandy became the new king of England and earned the name **William the Conqueror**. Because the French used mounted knights to help win the battle, knights became popular with the kings of Europe. And, because French-speaking Norman lords were invaders in the hostile land of England, they built strong **castles** for protection. In this way, the Norman Conquest encouraged the age of knights and castles during the Middle Ages.

The Normans also set up royal courts of justice throughout England which enforced **English Common Law**, meaning law common to the entire kingdom. William the Conqueror's grandson, King Henry II, did much to advance English Common Law including the principle of trial by jury. English Common Law later became the basis for our laws and legal system here in the United States.

feudalism

Feudalism was the military and social system which developed during the Middle Ages in Europe to provide protection from enemies such as Viking raiders or neighboring kings. Under feudalism people were born into permanent social classes for life, and all classes owed loyalty to higher-ranking members of society. At the bottom of society were peasants, or serfs, who farmed land owned by a lord, or noble. The serfs gave a portion of their produce to the lord in return for the lord's protection. Nobles, in turn, owed military service to the king in return for the king's protection. Another important group in feudal society was the **clergy**, or church officials.

Vassal is the term for a knight or a lord who provided service to a higher-ranking person. Vassals were often given **manors** which provided the vassal's income. A manor was a self-contained agricultural community with homes for serfs and craftsmen, a church, and a manor house where the "lord of the manor" lived with his family.

knight

Knights were mounted warriors in Europe of the Middle Ages. A knight served as a vassal to a lord. Mounted soldiers were needed to respond quickly to attacks from Vikings or other fast-moving raiders. The invention of the stirrup made mounted warfare much more effective. Before the stirrup, it was difficult to handle both a horse and a weapon which is why warriors in ancient times often fought from chariots. The stirrup gave knights a stable fighting platform and made it practical for knights to wear heavy armor and wield long lances. It is believed the Franks invented the stirrup which might help to explain how Charlemagne established his large empire in Europe.

Chivalry was the code of behavior expected of knights in the Middle Ages. The code of chivalry encouraged knights to be excellent horsemen, skilled in battle, brave, generous in victory, devoted to religion, educated in the arts, and willing to help the poor and needy. Knights were also expected to be courteous to women. Knights who followed the custom of "courtly love" chose an unobtainable fair lady to serve selflessly without hope of ever having her as his own. The model for chivalric behavior came from the legend of *King Arthur and the Knights of the Round Table*.

guilds

After civilization became reestablished in Europe and life became more settled, towns and cities grew to become important centers of commerce. Merchants could now become prosperous and influential members of society.

Many of the goods traded in the Middle Ages were produced by self-employed craftsmen who formed organizations called guilds to regulate the price and quality of their products such as metalwork, weaving and baking. Guilds were the forerunners of today's labor unions. Guilds also became civic organizations that helped to run Medieval towns.

During the late Middle Ages, merchants and craftsmen were beginning to form a new class in society, a **middle class** between the peasants and the nobility.

Thomas Becket

The murder of Thomas Becket illustrates the bitter power struggles that developed between the church and kings of the Middle Ages. King Henry II of England wanted to bring all of England under the control of the king's laws (English Common Law), but the church wanted to maintain its own system of courts. Hoping to take control of the church, King Henry appointed his trusted friend, Thomas Becket, as Archbishop of Canterbury, head of the Roman Catholic Church in England.

As archbishop, however, Becket defended the church against the king. Believing that the king wanted Becket dead, four of the king's barons went to Canterbury where they murdered Becket in his cathedral. Becket was declared a saint by the Catholic Church, and people from all over England went to his burial place in Canterbury to pray and be healed of sickness. One of the best-loved books in the English language, *The Canterbury Tales*, by **Geoffrey Chaucer**, is about a group of **pilgrims** setting out for Becket's tomb. (A pilgrim is one who travels for religious reasons.)

Some historians believe it might have been the intense competition between church and crown, and competition between the kingdoms of Europe, that spurred Europe to develop new ideas and new technologies that made it the dominant region of the world by the end of the Middle Ages.

Magna Carta

Medieval kings also struggled against their nobles for power. In 1215, noblemen forced King John of England to sign a list of rights known as the Magna Carta. The Magna Carta decreed that the king could not impose taxes without approval from the legislature, or **Parliament**, and that a free man in England could not be imprisoned or deprived of property without a legal process such as a trial. The Magna Carta was the beginning of representative democracy in Europe; these principles were later adopted in the U.S. Constitution and by other democracies throughout the world.

Islam

During the Middle Ages, the religion of Islam arose in the Middle East. Worshipers of Islam are called **Muslims**, their churches are mosques, and their God is **Allah**, the same God worshiped by Christians and Jews. Islam was founded in 622 by the prophet **Muhammad** who was born in Mecca in present day Saudi Arabia. Five times a day, Muslims face Mecca to pray. Islam quickly grew powerful in the Arab world, and Islamic rulers eventually took control of the Middle East, the Byzantine Empire, North Africa, and the southern half of Spain where Muslims were called Moors.

Muhammad encouraged learning, and he taught that men and women were equal. Muslims tolerated other religions, and they absorbed knowledge from many cultures including ancient Greece. From the Muslim world Europeans gained new knowledge of medicine, science and math. The Arabic numbering system, based on ten and the zero, replaced Roman numerals to become the numbering system we use today. Muslims passed along other inventions of the East including paper, gunpowder, the magnetic compass and the game of chess. The religion of Islam is still strongest in the Middle East and North Africa, but Islam is also the second largest religion in Europe after Christianity. The Islamic symbol of the crescent and star is found on the flags of Islamic nations.

Crusades

The **Holy Land** is a name used by Christians to describe the lands in which Jesus lived at the eastern end of the Mediterranean Sea. During the Middle Ages, the Holy Land came under control of Islamic rulers. Encouraged by Catholic popes, Christian kings and knights of Europe organized several military expeditions, or crusades, to the Middle East in an effort to take control of the Holy Land from the Muslims. Each side called the other "infidels" (non-believers). Crusaders conquered Jerusalem in 1099, but they were unable to hold the city and were driven out by the late 1200s.

Despite their failure, the Crusades had a big impact on Europe. Crusaders returned to Europe with new knowledge from the Muslim world and Asia. The Crusades made Europeans more willing to travel to distant lands which encouraged the great age of exploration which was to come.

Mongols

Mongols were nomadic tribesmen and superb mounted warriors from central Asia who swept east toward China and west toward Europe during the Middle Ages under the brilliant but ruthless leadership of **Genghis Khan** and his successors. Stopping just short of western Europe, the Mongol victories created the largest empire the world has ever seen.

The Mongol conquest of China was completed by Genghis Khan's grandson, **Kublai Khan**, who established the present day capital of **Beijing** and installed himself as emperor of China. Buddhism took a strong hold in East Asia when Kublai Khan made Buddhism the official religion of China. Kublai Khan's rich and fabulous court attracted an international group of adventurous men including the famous Italian traveler Marco Polo. But, the Mongols contributed little to the lands they conquered, and they were eventually absorbed into local cultures.

Marco Polo

Marco Polo was born in **Venice**, Italy in the mid-1200s. Venice had been founded on a group of swampy islands during the Dark Ages by people hoping to escape barbarian warfare. Over the centuries, Venice grew rich and powerful as a trading center between Europe and the Islamic lands to the east. Marco's father and uncle were traders, and when Marco was only sixteen-years-old he traveled with them to China. The Polos were the first Europeans to visit the court of the great Kublai Khan who appointed bright young Marco as his representative to the outlying provinces of China. The Polos remained in China until the Khan asked them to escort a Mongol princess to Iran for her marriage. From Iran they returned home to Venice some twenty-four years after they left.

Three years later, during fighting between the Italian city-states of Venice and Genoa, Marco Polo was captain of a Venetian warship when he was captured and imprisoned in Genoa. While in prison, he wrote ***The Travels of Marco Polo***, perhaps the most famous and influential travel book of all time. The book gave Europeans their first real knowledge of China; it became the basis for the first accurate European maps of Asia, and it eventually aroused in fellow Italian Christopher Columbus (of Genoa) an interest in the Orient that would result in his exploration of America.

Gothic architecture

During the Middle Ages, Roman architecture with its round arches, columns and domes came to be known as the **Romanesque** style. One of the most famous examples is the cathedral at Pisa, Italy and its bell tower, known as the Leaning Tower of Pisa. By the late Middle Ages, however, the Romanesque style was being replaced by the Gothic style. The most prominent feature of Gothic architecture is the pointed arch, but Gothic is also known for soaring ceilings, walls filled with glass windows and flying buttresses. Many great cathedrals of Europe were built in the Gothic style including Chartres, Reims, and Notre Dame, all in France.

A **flying buttress** is an external, arched support for the wall of a building. Flying buttresses allowed builders to construct tall, thin stone walls filled with stained-glass windows. Glass was extremely important to Gothic cathedrals: it lighted the interior, its beauty seemed inspired by God, and the Bible stories portrayed on the windows helped to teach about religion at a time when most people were illiterate.

Flying buttresses were developed for use at **Chartres Cathedral** which was built atop the wide foundation of a Romanesque cathedral that burned down. With its impressive sculptures and beautiful rose windows, Chartres is considered perhaps the finest example of Gothic architecture.

Black Death

Also called **the Plague**, the Black Death was a disease that wiped-out half the population of Europe during the 1300s, one of the worst disasters in history. The Plague was spread by fleas carried by rats. The Black Death caused major changes in European society. Many of those who survived lost faith in religion, but they enjoyed a higher **standard of living** because there were fewer rich people to share the wealth and fewer poor people to perform the necessary work, so they commanded higher wages. The children's nursery rhyme, "Ring Around the Rosie," comes to us from the time of the Black Death. The rosie is where the flea bites; "Ashes, ashes, all fall down."

Hundred Years' War

Because of the Norman Conquest of England by a French duke, the royal families of England and France were related, and they became even more closely related during later years through marriage. When a king of France died in the early 1300s, the royal families of both countries claimed the legal right to the French throne which led to war. With the help of Joan of Arc, the French eventually won the Hundred Years' War (which actually lasted 116 years).

Much changed during the Hundred Years' War. Mounted knights in armor were made obsolete by guns and powerful English long bows. Castles became obsolete because cannons could destroy stone fortifications. The entire feudal system was weakened when the people of England and France developed loyalties to their countries rather than to local feudal lords, and in the process the modern nations of France and England were born.

Joan of Arc

In a story strange but true, an illiterate peasant girl convinced the king of France to allow her to lead the French armies during the Hundred Years' War. At the age of seventeen, Joan of Arc led the French to victory over the English in a battle at Orleans, France in 1429. This was the turning point in the long war. Before Joan, France had been steadily losing ground to the English. After Joan, the French started winning and finally drove the English out of France in 1453. This is why Joan is loved by the French as their greatest patriot and why the English burned her at the stake. Although it took nearly 500 years, Joan was declared a saint by the Roman Catholic Church in 1920.

Unit 8 - Renaissance and the New World; *the modern mind emerges*

MAP IDENTIFICATION: Spain, West Indies, Caribbean Sea, Portugal, Iberian Peninsula, Amazon River, Andes Mountains, Incas

Renaissance

Knowledge and thought changed so much during the Renaissance that it is considered the end of the Middle Ages and the beginning of modern times. Renaissance means reawakening or rebirth, and it refers to the rediscovery of the literature and art of classical Greece and Rome. Excited about this new source of knowledge, Europeans began searching in the monasteries of Europe for the classical works copied by monks centuries earlier under the encouragement of Charlemagne.

The Renaissance began in Florence, Italy in roughly 1350 and spread to Rome and finally to much of Europe. The Renaissance period ended in the early 1600s. Four key developments occurred during the Renaissance: 1) the flourishing of arts and literature based on rediscovery of classical works, prompting a new interest in **humanism**, 2) the Protestant Reformation that tore apart the Christian world and reduced the power of the Catholic Church, 3) the voyages of discovery that led to the European conquest of America and European supremacy in the world, and 4) the printing press which encouraged widespread literacy and made it possible for large numbers of people to learn of the new developments of the Renaissance. Near the end of the Renaissance period, a **Scientific Revolution** began as people tried to use reason and observation to understand how the world works. The term renaissance is now used to describe any revival or rediscovery.

Christopher Columbus

Europeans depended on spices from Asia to preserve and flavor their foods. In the 1400s, the overland trade routes to Asia were disrupted as the Turks conquered the thousand-year-old Christian Byzantine Empire and replaced it with the Muslim **Ottoman Empire**. After years of persuasion, Christopher Columbus finally convinced the king and queen of **Spain** to finance a daring expedition to Asia. Columbus proposed to go east by sailing west; he would sail west around the globe and end up in Asia where Spain could establish a valuable spice trade.

While his theory was sound, his knowledge was flawed. Columbus believed the earth was much smaller than it is, and the unknown continents of North and South America stood in his way. Nonetheless, in 1492, with ignorance matched by his courage, Columbus sailed his little fleet of three small ships into the vast unknown Sea of Darkness (Atlantic Ocean) hoping to reach the East Indies of Asia. Instead, he landed in the West Indies of America. Although Columbus made four voyages to the New World, he died insisting that he had been to Asia, not a new continent. Consequences of his mistake - perhaps the greatest in history - included the European conquest of America; the deaths of 90% of America's native populations mostly due to disease; the African slave trade; a massive population shift from Europe to the New World and the founding of our nation, the United States.

latitude and longitude

This is the grid system developed by the ancient Greek scholar Ptolemy that identifies locations on the surface of the earth. Latitude is the measurement in degrees of a place's distance north or south of the **equator**. The equator is zero degrees latitude. Latitude can be measured by an **astrolabe** (a Muslim invention) such as Christopher Columbus used on his voyages to America.

Longitude is a measurement in degrees of a place's distance east or west of the **Prime Meridian**, which passes through Greenwich, England. The Prime Meridian is zero degrees longitude. Early explorers, such as Christopher Columbus, navigated without benefit of an instrument which could measure longitude, which is one reason why Columbus mistakenly thought he was in Asia when he was actually in America. The sextant, which can determine longitude, was not invented until 1730.

West Indies

The West Indies is an **archipelago**, a group of islands, in the **Caribbean Sea**. This is where Columbus first landed in 1492, on the island of Hispaniola (present day Haiti and the Dominican Republic). Columbus thought he was in the spice islands of the East Indies which is why Native Americans were called "Indians." There were 8 million Native Americans living on Hispaniola when Columbus arrived; by 1535 there were none. Other major archipelagos are Hawaii and Japan.

Latin America

This term is applied to all of the Portuguese or Spanish-speaking nations south of the U.S. including those of Central America, South America and Mexico. **Central America** is a region, not a continent, that links North America to South America, but it is considered to be part of North America. The **Panama Canal**, linking the Atlantic and Pacific Oceans, is located in Central America.

Ferdinand Magellan

Magellan was a Portuguese navigator of the 1500s who sailed for Spain. His crew was the first to sail around the earth, although Magellan himself was killed in the Philippines by a poisoned arrow. Only 18 of Magellan's 230 sailors survived the trip. The voyage proved how big the earth really was.

Magellan was one of many mariners from **Portugal**, a European coastal nation which explored the coasts of Africa. The first explorer to find a sea route from Europe to Asia was the Portuguese sea captain, **Vasco de Gama**, who sailed around Africa to reach the Indian Ocean. What motivated these fearless explorers? Probably adventure and a chance to win wealth, fame and glory.

South America

The continent of South America was explored and conquered by Spain and Portugal which agreed to divide the continent between themselves. Today most South American countries speak Spanish, but the largest nation, **Brazil**, speaks Portuguese. Major geographic features of South America include the **Andes Mountains**, the **Amazon River** and rain forests of the Amazon basin.

Created by the collision of the Pacific and South American plates, the Andes are one of the great mountain systems of the world. The Andes range extends more than 4,500 miles along South America's Pacific Ocean coast averaging 150 miles wide and 12,000 feet high.

The Amazon River is named after legendary women warriors of Greek mythology because it was once believed that women warriors lived along the banks of the Amazon. With its source in the Andes mountains of northern **Peru**, the Amazon flows across northern Brazil through the world's largest rain forest before emptying into the Atlantic Ocean. Although the Amazon carries more water than any other river, it is the second longest river after the Nile.

Incas

The Incas were a Native American people who built a great civilization along the Pacific coast of South America in the 1400s and 1500s. The Inca empire, largest in the Americas, was linked by an elaborate system of paved roads, bridges and tunnels. In 1533, with fewer than 200 foot soldiers and cavalry, the Spanish **conquistador** Francisco Pizarro routed an Inca army of 80,000 warriors and captured the Inca leader, Atahualpa, which led to the end of the Inca Empire. Pizarro promised to release Atahualpa if he were given two rooms filled with gold and silver as a ransom payment. After the ransom was paid, Pizarro had Atahualpa put to death anyway. Wealthy beyond measure, the Spaniards fought among themselves, and Pizarro was killed by his own men.

The center of the Inca Empire was in present-day Peru. Hidden high in the Andes mountains was the spectacular Inca city of **Machu Picchu** which was never found by the Spaniards. These ruins, a major archeological discovery, weren't located until 1911.

Conquistadors were soldiers who brought Spanish rule to lands of the New World by conquering Native American peoples, a task aided by the Spaniards' use of advanced technology. Inca war clubs were no match for steel swords and armor, firearms and cavalry. Conquistadors hoped to enrich themselves and Spain by discovering gold and precious gems in America. Their mission also included the conversion of native populations to Christianity.

Maya

The Maya were a people of southern Mexico and Central America who developed the most advanced native civilization of the New World. They produced fine arts, a calendar of 365-1/4 days and impressive pyramid-shaped temples in large cities. The Maya also had a written language. Southern Mexico and Sumer are the only two places in the world where writing is known to have originated independently. Although Maya civilization flourished for centuries, it had grown weak before it was conquered by the Spanish around 1600. The Maya had apparently been too successful; they overpopulated their land, depleting it of natural resources which led to their decline.

Aztecs

The Aztecs of central and southern Mexico were another advanced native culture of **Mesoamerica**, the middle region of the Americas. The Aztecs were fierce and warlike, and their polytheistic religion practiced human sacrifice on a scale unknown elsewhere in history. The Aztecs built their capital on swampy marshland in what is now Mexico City. When the Spaniards arrived, they were amazed to find an island city connected to the mainland by four great highways, bridges and aqueducts. There was also a hundred-foot-high temple and a marketplace that attracted 60,000 people a day.

The Aztec empire fell in 1519 when the Aztec leader Montezuma was conquered by the Spanish conquistador Hernando Cortes (also spelled Cortez). A number of locations in the southwestern United States have names taken from Aztec history because early settlers were under the mistaken impression that the Southwest's Anasazi ruins were part of the Aztec empire.

MAP IDENTIFICATION: Peru, Brazil, Central America, Maya, Mexico, Aztecs, Germany

Florence

Explorers and conquerors of this period in history came from the small continent of Europe which was now the dominant region of the world. Europe was experiencing a burst of creative energy called the Renaissance that began in Florence, a city-state in central Italy. Like Athens during the Age of Pericles, Florence had a political leader who attracted to his city the best minds and artists of the day. He was **Lorenzo de Medici**, known as “Lorenzo the Magnificent,” a wealthy banker who took a great interest in recovering classical literature and in supporting artists such as da Vinci and Michelangelo. Artists and thinkers of the Renaissance, like the classical Greeks who inspired them, were humanists, interested in studying and improving the human experience on earth.

Machiavelli

Niccolo Machiavelli was a diplomat in Florence during the Renaissance, a time of intense political rivalry among competing Italian city-states and the other countries in Europe. Based on his experiences, Machiavelli wrote several books about war and politics. The best known is *The Prince* in which Machiavelli says that a prince (ruler) must use cunning and ruthless methods to stay in power. Machiavelli was a humanist who believed people fared better under strong rulers than weak ones. But, because Machiavelli promoted political effectiveness over morality in his book, the term “Machiavellian” has come to mean manipulating others in a clever and deceptive way.

Leonardo da Vinci

Growing up in Florence, young Leonardo received the best artistic education available and he went on to create the most famous painting in the world, the *Mona Lisa*. Art, however, was only one of da Vinci’s interests; he designed weapons, bridges, buildings and fanciful inventions that were never constructed such as flying machines.

Leonardo was a scientific observer who used his artistic ability to explore and describe principles of nature. In his notebooks, Leonardo illustrated, for example, the circulation of blood, the operation of the eye, and the effect of the moon on tides. Still, Leonardo is best remembered for his paintings. His *Last Supper*, although deteriorated, remains an excellent example of the use of **perspective** in painting. The *Mona Lisa* demonstrated artistic techniques that influenced all later Renaissance artists, and it is an example of the Renaissance concern with humanistic subject matter in art. No longer did artists paint only religious subjects; they also portrayed real people from their own time. The *Mona Lisa* was a favorite of da Vinci’s; he always kept it with him until his death in France, which is why the painting is now on display at the Louvre gallery in Paris.

When he died, da Vinci’s official title was First Painter, Architect, and Mechanic of the King. Da Vinci is often cited as a model of the **Renaissance man**, a term which means an outstandingly versatile person who performs brilliantly in several different fields.

Michelangelo

At the age of 15, Michelangelo was invited to join the household of Lorenzo de Medici who recognized the young man’s talent. In Florence, Michelangelo sculpted the *David*, the most famous sculpture of the Renaissance and a symbol of the new confidence and humanism of Renaissance man. In Rome, Michelangelo created the *Pieta*, a sculpture of Mary, the mother of Jesus, holding the dead body of Christ; the word means “pity” in Italian. Michelangelo also painted the ceiling and rear wall of the Sistine Chapel and designed the large dome of Saint Peter’s Basilica (church). As a sculptor, painter, and architect, Michelangelo exerted a strong influence on Western art and is considered one of the greatest artists of all time.

Michelangelo painted on wet plaster, a technique called **fresco**. When the plaster dries, the painting is bonded to the wall. Oil paints, which became popular during the Renaissance, made art more portable than fresco painting. Art could now go into people’s homes and be hung on walls.

the Vatican

Vatican City is an independent nation within the city of Rome. At one-fifth of a square mile, it is the world’s smallest country. The Vatican is home to the Roman Catholic Church and the pope.

Located within the Vatican is the **Sistine Chapel** where Michelangelo spent four years on a scaffolding painting biblical scenes on the ceiling including *the Creation*. Michelangelo painted his *Last Judgment* on the rear wall of the chapel. The Sistine Chapel is where cardinals (high officials) of the Roman Catholic Church meet to choose a new pope.

Also at the Vatican, **Saint Peter’s Basilica** is the home church of the pope and the largest Christian church building in the world. Inside is Michelangelo’s *Pieta*. In front of the basilica is Saint Peter’s Square where the pope greets huge crowds on special occasions.

Martin Luther

As a Catholic monk and university professor in Germany, Martin Luther became concerned about the sale of **indulgences**. Indulgences were a church practice that allowed a person to pay money to be forgiven of sins; the money was being collected to build St. Peter's Basilica in Rome. Luther attacked the sale of indulgences in a paper called the **95 Theses** (or arguments). It is said he published his *95 Theses* by nailing them to the door of a Catholic church in Wittenberg, Germany.

Although Luther was merely trying to reform Catholic practices, his writings triggered the Protestant Reformation which resulted in the establishment of **Protestant** churches which broke away from the Roman Catholic Church. The **Reformation** split the Christian world, giving many monarchs the excuse they wanted to limit the power of the Catholic Church, and it prompted a century of bloody warfare between Protestants and Catholics.

In response to the Reformation, the Catholic Church launched a **Counter-Reformation** which adopted important reforms of the church such as ending indulgences, but it also stepped up the work of the **Inquisition**. The Inquisition was a church court that put on trial those who disagreed with Catholic teachings; it sometimes obtained confessions through imprisonment and torture.

Henry VIII

Watching the Reformation unfold from England was King Henry VIII, who wanted to divorce his first wife so he could marry the young and lovely **Ann Boleyn** whom he hoped might bear him a son and heir to the throne. When the pope in Rome refused to grant the divorce, Henry responded by making himself head of the Christian church in England in place of the pope. Since that time (except for a few years), England has been a Protestant nation. Those who refused to accept Henry as head of the English church lost their heads including Henry's close friend and adviser **Thomas More**, the respected author of *Utopia*, an influential book about the ideal state.

After only three years of marriage - and no son - Henry accused Ann Boleyn of committing adultery with five men and he executed all six. The next day he announced he would marry Jane Seymour who did bear Henry a son, but she died in the process. Henry married three more times, divorcing another wife and executing a second for adultery. His sixth wife outlived him. A daughter born to Henry and Anne Boleyn became **Queen Elizabeth I**, one of history's most brilliant rulers.

William Shakespeare

England's greatest contribution to the art of the Renaissance were the plays of William Shakespeare. Although they were popular in his day, they were considered to be low-class entertainment. Now, Shakespeare is regarded as the greatest writer in the English language. Among his plays, performed at the Globe Theater in London, were *Julius Caesar* and *Antony and Cleopatra*, works which demonstrate the Renaissance interest in classical antiquity. Modern languages advanced during the Renaissance, and many Greek and Latin words were added to the English language.

Galileo

Born in Italy the same year as Shakespeare was a scientist who changed forever the way we see the universe. Galileo perfected an early telescope which he trained on the heavens where he saw four moons orbiting the planet Jupiter. This and other evidence contradicted the model of the universe developed by the ancient Greek astronomer Ptolemy which held that Earth was the center of the universe and that all heavenly bodies revolved around it.

Galileo published his findings in a book with the poetic title, *The Starry Messenger*. Unfortunately for Galileo, Roman Catholic church doctrine (rules and beliefs) supported the Earth-centered model of the universe. Because Galileo challenged this view, he was tried by the church for heresy (disagreeing with church doctrine) and he was imprisoned for the remainder of his life. Galileo has become a symbol of the fight against authority for freedom of thought. Galileo's observations helped to start a **Scientific Revolution** that would soon reveal wonderful new knowledge of our world including laws of motion and gravity and tiny creatures swimming in a drop of water.

Gutenberg

Johann Gutenberg was a German goldsmith of the 1400s who developed **metal movable type** for the printing press. The first book printed on Gutenberg's press was a beautiful version of the Bible, a few copies of which still exist. Movable type is a technique that uses one piece of type for each letter. After printing many copies of one page, the type can be reused to print more pages. Before this, it took a person about six months to copy one book by hand. Printing made books much less expensive and more widely available, giving people a reason to learn how to read and write. Consequently, the printing press greatly expanded literacy and made it easier for new ideas to spread such as Galileo's *Starry Messenger* and the *95 Theses* of Martin Luther. Some people believe Gutenberg's invention was the most important historical event of the last thousand years.