## 5. Ancient Rome (753 BCE- 476CE)

- Geography
  - Rome in the middle of the boot> not by the ocean> inland
    - Village in region called Latium (they spoke latin)
    - · Started off as a tiny village
      - · Came to control biggest and most integrated empire in the world



- Origins of Rome
  - The foundation of Rome (753BCE)
    - · Remus and Romulus
      - · City of Rome named after of Romulus
      - · Orphan brothers raised by a wolf
      - · Romulus first king of the city of Rome
      - · Romans were badass, ancestors are Gods so they feel superior
    - Aenaes
      - Developed by poet Ovet
      - · Fled from the burning city of Troy
      - · Liked feeling connected to the Greeks
      - · Links Roman history with the history of the Greeks
        - · Links Rome with the fascinating Greek heritage of Homer's Troy
    - Used these stories to portray themselves
  - The Etruscans

- They created the first permanent settlements in Italian peninsula
- In many ways, similar to Greek city-states
- Very advanced, culturally > similar political style
- For a very long time, completely forgotten due to Roman conquest, but recently rediscovered
- · Their legacy> enormous legacy in Roman culture
  - Etruscans alphabet
  - The art of building roads
    - Built in an arch
  - Toga
    - Legacy of legal system comes from Romans
    - · Official dress code
  - Gladiators > gladiator combats
    - · Origin of entertainment by watching people fight
- The conquest of Italy
  - · Very early on, Romans possess military genius!
    - Advanced military tactics and strategy
    - Military even today learn the tactics of the Romans
    - Play making of American football comes from Roman war tactics
      - · How to deploy army in function of the enemy
    - · Army divided in legions
    - · Citizen-soldiers organized in legions
      - · Only citizen land owner could fight
      - · Roman citizens were motivated by fighting for your land and your honour
      - Slaves couldn't fight > didn't want to pay people to fight
    - Conclusion of strategic "alliance" with surrounding town of the "Latium"
  - Most of Italy under Roman rule by 265 BCE
    - · Imposed alliances
    - · Not gonna raise your cities if you pay us taxes and give us soldiers
    - They were somewhat independent but payed taxes to Rome
- · Political and military history
  - · Ancient Roman history is traditionally decided into three distinct period
    - Monarchy Period (753-509 BCE)
      - Not much written record survived from this period
      - We only have the accounts of ancient historian > which we take to a certain degrees
      - In early days, Roma has a king > default political system
        - Little is known about "monarchy-period": difficult to differentiate history from myth!
          - · Barely any written record
        - Remembered as darker days in Roman history: sanguinarian kings who ruled with terror and might
        - In later periods, "Monarchy" and "King" would become dirty words in Roman politics
        - · Despised kings because of their history
      - Some of these kings are Etruscans (foreigners)
      - In this period, Rome slowly starts expanding, conquering nearby villages in the Latium
      - Had a total of 7 kings
    - Roman Republic (509-27 BCE)
      - Creation of the Republic
        - Circumstances of political change is unclear

- Rome becomes some kind of oligarchy (ruled by a few> wealthy families)> wealthy few
  decide everything
  - No more kings
  - The Senate
    - · Elite would meet up and discuss
    - · All patresfamilias of the wealthiest families
- The patricians in charges (the patresfamilias> oldest male was in charge of the whole household> decided everything)
  - Members of non-aristocracy families: plebeian
  - Some were very wealthy and knowledgeable, but they didn't have the right family name
  - The Struggle of the Orders (494-287BCE)
    - · Plebeians succeeded in creating their own Plebeian Senate
    - · They did multiple strikes to put pressure to be recognize
    - · Fight to gain political power
- The client-patron system
  - A very wealthy patricians (the patron) would take care of other patricians and they
    would pledge their political allegiance to their patron > influential> large network of
    connection
    - · Mafia connections
- Structure of the Roman Republic:
  - Senate (300+ members)
    - · Senate: Actual meeting place where people would argue for hours
      - · Seats attributed to every senator
      - · Most important political establishment
      - · Only the senators get to vote
  - Executive magistrates
    - · Chosen by the senate
    - Consuls (2)
      - · Kinda like the American president
      - Elected for 1 year
      - · No one individual would be too powerful
      - · War generals
    - Praetors (2)
      - · Second in command
      - · Takes the Consuls' position when they are in was
    - Quaestors
      - · People who collect the taxation
      - In charge of taxation and the treasury
    - If you were chosen in one of these magistrates position afterwards you become a senator
- Plebeian Assembly
  - Refuse to fight during the Struggle of the Orders so they got an Assembly
  - Kinda like Senate but less powerful > handle basic stuff (trash collecting, aqueduct)
  - Tribunes
    - Consul for the plebeians
- Dictators
  - If there is a catastrophe, the senate will name a dictator
  - · For 6 month or until the problem was solved the dictator had absolute power

- The Punic Wars (264-146 BCE)
  - As stated before, most of Italy under Roman ruled by 265 BCE
  - There is only one other regional empire standing in their way: The Carthaginian Empire
    - · Punic is latin for Phoenician
    - · Carthage vs Rome
      - · Carthage is in Tunesia



- · Descendants of Phoenician
- · Carthaginian were more powerful then Rome in the beginning
- Romans had to create a navy to be able to defeat them
  - Crashed a Carthaginian ship by wrecking one and dragging it out of the sea and studying the structure
- 1st Punic War (264-241 BCE)
  - · Rome takes Sicily, Sardinia, Corsica
- · 2nd Punic War
  - General Hannibal
    - Carthaginian had elephants in their army (around 70)
    - March through southern Spain and Alpes> Arrived in Northern Italy
      - Carthage invades Italy, but eventually loses (battle of Cannae)
        - · Bloodiest war until WW1
      - Romans were unprepared
      - They capture the Italian Peninsula but never Rome
  - Rome takes Hispania> Takes back the land
  - The Carthaginians were forced to pay taxes to the Romans
- 3rd Punic War (149-146)
  - · War of vengeance, Carthage obliterated
  - Romans decide to completely massacre Carthaginians because even if they lost they felt like they were a threat
- Conquest of the Hellenistic kingdoms (146-30BCE)
  - Philip V, beloved Antigonid king of Macedonia
    - · Big mistake: allied with Carthage
  - Saw Macedonian as enemies since the Macedonians were supporting the Carthaginians
  - Romans conquered Macedonia and pushed forward

- · Also defeat Seleucid (near east) and Ptolemaic (Egypt) kingdoms
- · Rome kept making new enemies so kept fighting
  - · Preemptive wars
- Hellenization of Roman society starts in this period
  - Educated Romans learn Greek
  - · Romans emulated Greek religion, drama, sculpture, cuisine, philosophy
  - · Romans considered an empire of borrowers
  - Yet Romans remain different
    - · Much more militaristic, and overall very conservative
    - · Value order much more
- Civil War: the end of the Republic (133-27BCE)
  - Almost 100 years of civil war> war among the Roman people
  - The Roman empire is now enormous! This causes several problems
    - · Sending orders was very hard
    - The Roman Constitution was designed to govern a single city, but now unfit to rule this enormous land!
      - Senators were disconnected from the decisions they were making> they never travelled to the places they ruled
    - Great generals of the army have become extremely influential: political career based on military exploit> Army controlled the politician
    - · Growing social inequality: large landowner (latifundia) and landless soldiers
      - The treasure won in Rome went to the rich
      - · Landless soldiers> their farms will get destroyed during their years of fighting
        - · Rich people end up buying their land
        - · Tons of soldiers came back from the war and had nothing
  - 133-27 BCE is a period of almost constant instability and civil war
  - The Gracchi brothers (169-121)
    - · Two brothers
    - Tiberius Gracchus (169-133BCE)
      - Men of the people
      - Were part in the Tribune (representative of the plebeians)
      - Had a program of redistribution
        - Took land away from the rich to give to the poor
      - · Land reforms to favour the landless soldiers
      - Senate was angry because they were the rich landowners
      - However, Tiberius had so much power and influence
      - Food distributed to Roman civilians
        - Said that Rome was wealthy enough to never let the population go hungry
      - Popular with the masses, but unpopular with the Rich
      - Brutally murdered by conservative senators
        - · Many of his followers also got murdered
    - Gaius Gracchus (154-121 BCE)
      - · Continues the work of his deceased brother
      - · Also murdered by senators
  - Marius (157-86 BCE)
    - · General of the Roman empire
    - · Introduced the Marian reforms
    - · Completely transformed the Roman empire
    - · He would give land to his soldiers if they won

- Soldiers were motivated by this and extremely dedicated
- Profound and decisive transformation of Roman army
- Soldiers now serve their general rather than the Senate
  - · Marius found a way to give them a land
- Was a huge threat since he now had an army devoted to him
  - · Army controlled by one and not by the republic
- Other Roman generals followed in his steps
- Sulla (138-78 BCE)
  - Another great general, and political rival of Marius
  - Marches on Rome with army to dispose Marius' supporters
  - When he was off to fight an army
    - He hears news that Marius took control of the Rome so he turned around and attacked Rome and Marius' army
    - · Wins the battle against Marius
  - Dictator for 2 years, completely transforms for Republic
  - · Also admired by his soldiers
  - · Also guaranteed the welfare of his soldiers
  - Controlled a big army
  - Intense rivalry with Marius
- Julius Caesar (100-44 BCE)
  - · Political heir of Sulla, admires his strength and power
  - Fantastic military leader, revered by his army
  - Greatest military commander in western history
  - Invented tons of strategy
  - Conquers Gaul
  - · His army strongly admires him> absolute devotion of his soldiers
    - Godlike appereance
  - · Managed to be named dictator for life
  - Consul for life
  - · Absolute ruler of Rome
  - Completely strips Senate of its power, but murdered as a result
    - · The Senate murders Julius Caesar
  - · Death of Julius Caesar causes yet another civil war
    - Political heirs of Caesar (Octavian, Lepidus, Mark Anthony) chase out and defeat Caesar's murderers in a series of battle then turns on each other, in a bloody war
  - Octavian (63 BCE-14BCE) emerges as ultimate victor, putting an end to era of civil war in Rome
    - He won the battle against the two others
    - In 27 BCE, The Senate (or what's left of it) proclaims Octavian as "Augustus" a name he will carry until his death
      - Augustus> the admired on
      - When Augustus becomes absolute leader of Rome, end of Roman Republic
      - This date (27BCE) chosen by historians to mark end of the Republican period, and the beginning of the Roman Empire
- Roman Empire
  - · Augustus and the "principate"
    - After years of constant civil war, Augustus promises to "restore" the Republic. In practice, he abolishes it:

- Principate is the list of role he assumes > It is the name given to this specific collection of powers, which are normally in separate hands
- Said that he will give back the power to the Senate when he died
  - Roles assumed by Augustus himself (principate> all the powers)
    - Consul for life > represent Patricians
    - Tribune for life > represents Plebeians
    - Imperator
      - Used to have next to no meaning
      - · However he made it have meaning
      - Called himself the imperator to take control of the army without scarring people
    - Pontifex Maximus
      - Leader of the Roman religion
      - Spiritual leader as well as military and political
    - · Princeps civitatis
      - First Roman citizen
- Augustus is extremely cunning! He knows that using inflammatory language will get him killed!
- · He is much more than a politician or a leader
  - His political genius lies in the fact that, by using non-inflammatory language and positions that previously had no real meaning, he became the absolute ruler of Rome, without anybody truly noticing!
  - In effect the most powerful man that ever lived!
    - · The word Emperor comes from here
    - All future European emperors named "August"
  - At his death, Augustus transmits the power of the "principate" to his son-in-law and political heir, Tiberus
    - Emperorship has officially become the norm
- The "Pax Romana" (27 BCE- 180CE)
  - Roman peace
  - · 200 years of relative peace and prosperity for the Roman Empire
  - · Civil war has ended
  - Process of Romanization, Latin=lingua franca
  - · Rome reaches its greatest grandeur
    - · Over 1 million inhabitants, biggest city in history
  - · Boundaries of Rome reach their greatest extent
  - Most Emperors provide Rome with strong leadership, unity and unmatched military power
  - · Three dynasties
    - Julio-Claudians
      - · Descendants of Julius Caesar
    - Flavians
    - The "Five Good Emperors"
  - The enormous power of the Praetorian Guard
    - Private army of the emperor
    - · Best soldiers who's only role was to protect to emperor
    - Murdered the horrible emperors (Caligula, Nero)
    - · Had power over life and dead of emperor
- The "turmoil" of the third century (180-284)
  - Beginning of the collapse

- Problems arise under Marcus Aurelius (161-180)
  - The "Antonine Plaque"
  - Floods of the Tiber > bad harvests> inflation and famine
  - Less food leads to instability
  - Growing instability in the frontier regions (Germanic tribes)
    - · Local population more and more dissatisfied
- M-A's son, Commodus (180-192), one of Rome's worst emperors
  - Absolute megalomaniac
  - · Changed everything to glorify himself
  - · Not interested in famine
  - · Saw himself as a descendant of Hercules
  - · Spent all his time fighting in gladiator combats
  - Short civil war in wake of his murder (by strangulation)
  - · Severus and Caracalla reform the army> firm hold during a couple of years
    - · Grant citizenship to all male adults in the Empire
- The "Barrack Empire" (235-285)
  - Many emperors
  - · Got their power from raising in the army
- · Not only political turmoil
  - Transformation of the Roman army
  - · Rome had to pay their army more and more
  - Reforms of Severus and Caracalla> grants citizenship to all male adults in the Empire
  - Terrible inflation problems
  - · Soldiers only wanted money since more Barbaric
  - Salaries were getting bigger and bigger so some emperors started blending their money with the cheep metal which brings down the value of money
  - · Declining agricultural production in all regions of the empire
  - Ever-increasing taxation > Empire needed money to solve their problems
- Continuing problem of plague
- The Emperor Diocletian (285-305)
  - · Augustus in the east
    - · Believed that Venus was his ancestor
  - First of the Barrack Emperors to get a firm grasp on the emperorship
  - Realizes that Rome needs to be deeply reformed if property and stability is to be returned
  - · Diocletian's reforms
    - · Division of the empire in two halves
    - · Further administrative division into "dioceses"
    - Division of emperorship > Tetrarchy (4 Emperor)
- The Emperor Constantine (306-337)
  - "Augustus" in the East, Constantine is by far the strongest "tetrarch" of the time >most powerful one
  - · Prosperity and Peace
  - Leading figures in Christianity
  - The foundation of "New Rome" (Constantinople) \*KNOW THE LOCATION\*
    - On the ancient Greek city of Byzantine (Istanbul today)
    - Control sea root from Black Sea to Mediterranean sea
    - Controls major trade root with the rest of the world



- · A temporary return to Roman glory and power
  - Creation of new currency (solidus) > Standard currency in Europe
  - · Resettlement of regions abandoned during 3rd century
  - · Significant military victories against Germanic tribes
- · Still some deep problems are worsening
  - Agriculture continues to decline
  - Still high taxes
  - Slow transition to Medieval story
    - Creation of serfdom
      - People have to work the land > were not free, but not slaves
- The "Barbarian Invasion"
  - Germanic tribes have been migrating into Roman territory on and off since at least 100 BCE
  - A phenomenon affecting almost only West Europe
  - Significant increase during 3rd and 4rd century
  - · More and more "Barbarians" within army
    - · Had to attack their own people
    - · Some Barbarians settled in the Roman empire
  - During the 5th century, establishment of small Germanic kingdoms within Roman borders
  - · Rome sacked by Vandals in 455
  - 476 (know this date), Odoacer deposes Romulus Augustus, becomes king of Italy (official end of Western Roman Empire)
  - N.B What we call the "Collapse of the Roman Empire" (476 CE) is actually the fall of the Western Roman Empire
    - · What happens to the Eastern Roman Empire
    - Lasts until 1453, known by historians as the Byzantine Empitr
- Religion
  - Traditional Roman religious
    - Piety (pietas), or the respect of religious traditions and the maintenance of good relations with the gods, was always understood as the source of Roman power and success
      - · Maintain a good relationship with the gods

- They thought religious was the reason of their success> they had the best relationship with God so they won many wars
- Early Roman religion consists of a combination of the veneration of ancestors, who have god-like qualities, and the adoption of foreign gods
  - · Anna's was believed to be the son of Venus
  - · Lineage is very important
  - · Romans were descendants of gods
- Enormous Greek influence
  - In centuries following invasion of Greece, Romans essentially adopt all of Greek religious tradition, while giving Roman names to gods
  - · Roman Religion becomes very individualistic
    - Everyone celebrates religious rites in their own home, religion is rarely celebrated publicity
    - In hard time however, people turn to religion to find a meaning > christianity encourages community creates support
    - When Rome experiences harder times (civil war, political turmoil, economic hardships, etc), many Romans feel a spiritual void
    - Roman religion does not provide common cause, charity, support, mutual help...
- Rise of Christianity
  - · Minor events in the Roman province of Judaea
    - Normal that people would get killed for having reforming ideas, being insurgent
    - It was not popular with Jews in Judaea
  - Can't rely on the Bible for historical information
  - Climate of intense instability in Judaea [modern day Israel] (zealots> Jews who fought against the Roman)
    - Born around the year 0. Augustus was the emperor at the time
    - End of the civil war, but frontier regions were unstable
  - · Hebrews believe in approach of a final struggle
    - They were always controlled by foreign leaders
    - Believed that one day they would have their own nation
  - The imminent arrival of a saviour (messiah)
    - · Believed that God while send them a saviour
    - · Because of all the instability they thought the messiah was going to come soon
  - Grew up in a very religious household
    - · Someone deeply religious who wanted to spread the message of religious
    - · Born in Galilé
      - · Very multicultural part of the world
    - · Next to no information about the first 30 years of his life
    - · Was a common carpenter before
    - · Around 30 years old, he gained a cult following
    - · After his death did they turn his teachings into a religion
  - · What was his message
    - · You must believe in God and ask for forgiveness
    - · Message about love
      - · Love God and your neighbours
    - · Very anchored in Judaism
    - · He claimed to be the Messiah
      - · Only few people believed him
  - Portrayed caucasian> europeans portrayed him to look like themselves

- Pontius Pilate, the Roman prefect of Judaea
  - Portrayed as ultimate bad guy by religion
  - · His job was to create stability in Judaea>maintain peace
  - Trouble at Passover in Jerusalem
    - Issues when Jesus and his followers went to this celebration
    - Jews felt like he was insulting their religion and people thought that trouble and riots were brewing
    - · Pontius Pilate killed him to avoid conflict
    - · Rumour that he raised from his dead after threes days of his death
  - The crucifixion of Jesus
  - · The resurrection
- · The Spread of Christianity
  - In the 2nd, 3rd and 4th century, Christianity becomes phenomenally successful
    - Mysterious new religion promising love and immortality to all!
      - · Internal happiness if you beg for forgiveness
    - Forgiveness
    - Provides a common cause, a sense of community, in an age of individualism, poverty and chaos
    - Christianity left Judaea and became a Roman religion
      - · Religion of the Roman empire
  - · Only caught on with non Jewish people
  - · Paul of Tarsis
    - · Wrote down letters preaching people to be Christian
    - At first prosecuted Christians in Judaea and then had a revelation
- The legal evolution of Christianity
  - All the way until Diocletian (284-305), Christianity is illegal in the Empire and Christians are actively persecuted
    - · Killed in Colosseums
  - Constantine (306-337) introduces Edict of Milan (313), officially legalizing all religions (including Christianity)
    - Constantine involved in church matters (First Council of Nicaea)
      - He was not Christian but realized that Christianity was important
      - · Ordered the First Council of Nicaea
        - · Religious people debated for a uniform belief of Christianity
    - · Was baptized as Christian shortly before his death
    - Remembered as a great Saint by Orthodox Christian Church
  - Emperor Theodosius (379-395)
    - Makes Christianity official religion of Roman Empire, and makes practicing traditional Roman religion a treasonable offence
      - There was immense power in Christianity> emperors made themselves the head of that church
    - Allows Church to handle its own tribunals (foundation of later Church power)
- Philosophy, art, science and culture
  - Philosophy
    - · Again, largely inspired by the Geeks
      - Educated Romans learned latin and greek
      - · A few noteworthy Roman thinkers, but not their forte
      - Erudite Romans study Plato, Aristotle, Socrates, Sophists
      - · Stoicism and epicureanism were also very influential among Roman thinkers

- Probably the most highly regarded philosopher of entire Roman history is the emperor Marcus Aurelius (161-180)
  - Meditations (written during his emperorship) is a collection of personal reflections and notes on Stoic philosophy, and the nature of ruling
    - Reflection on power and the relation between good and evil
  - Never meant to be published, but today, widely regarded as a masterpiece of philosophical literature
- Science
  - · Again Roman science largely founded on Greek science
  - Romans much more practical; long discussions on theoretical research about the universe or the nature of things is seen as pointless and vain
    - · Not well seen to waste time on theoretical constructs
    - · Physics improves war machine
    - · Biology to improve crop yield
    - Mathematics and geometry to built impressive structures and buildings!
  - Historians have traditionally described Romans as scientifically moribund; did not improve much on Greek advances
    - This is slightly changing now, with several practical advances recognized, especially in the field of engineering
  - · Solid aqueducs that are still there today
  - Colosseum
  - · Invented concrete
  - Invented advance plumbing technique> running water faucets
- Art and Architecture
  - · Again enormous Greek influence
    - · Idealism, realism, and humanism, in art
    - · Greek forms in architecture
    - Male muscular body was the epitome of beauty > patriarchal
    - Busques were painted> represent perfectly a human being
    - · Emperors didn't want to have wrinkles of their busk> wanted to look like gods
- · Legacy in western world
  - While Greece left a more romantic and culturally rich legacy, Rome's legacy is perhaps more strongly felt today
    - European geography
      - Cities, countries
    - European languages
    - Patronyms (names)
    - · Political forms and vocabulary
    - Codified law
  - An enormous, ancient, and ever-expanding field of academic enquiry
    - E. Gibbons' Decline and Fall of the Roman Empire (1788)
    - · Modern Roman historical enquiry

## Middle Ages

- Geography
  - · Very difficult to discuss Medieval geography
    - Borders constantly moving, changing, evolving...
  - In Western medieval history, we tend to focus on the Franks



- Religion
  - During the Middle Ages, the clergy is as, if not more powerful than political institutions
    - With political structures so changing, fleeting and ephemeral, "Christendom" is held together by the clergy
      - Christendom (Roman Catholic > led by the Vatican and the Pope, Orthodox Christian Church > In Constantinople)
    - An astoundingly powerful spiritual authority
      - · As shown by Crusades, fear of excommunication (banned from the church), etc...
      - The Church just had to release a command
    - A government in itself? Tithes (taxes collected by a religious authority), courts, inquisition
      - All powers usually held by governments were controlled by the Church
      - The hierarchy of the Roman Catholic Church is far more centralized and consistent than any political institution
        - Pope (Head of the church)
        - · Cardinal (Leaders of the catholic church)
        - Archbishops (Serve over several dioceses)
        - Bishop(Senior member> in charge of a dioceses)
        - Priest(Serves one parish)

- · Friars, Monks, Nuns
- · A mutually beneficial arrangement
  - · Government supply lands, legal power, and defence
  - Church provides legitimacy, educated individual for public office
    - Government has the legitimacy of God
    - · A king becomes legitimate in the eyes of the people and God
    - Church supplied educated bureaucrats
- Philosophy, Science, Art and Architecture
  - Philosophy
    - The intellectual world of medieval Europe is completely dominated by Christian "theology"
      - Study of the nature of God and religious truth; rational inquire into religion questions, especially those truth posed by an organized religious community
    - The Bible is the source of all truth! Anything that contradicts Bible must be discarded
      - For this reason, the works of medieval philosophers is often to "translate" or "re-interpret" the work of Antique philosophers to align them with Christianity
      - Aristotle: most important source of knowledge and thought throughout M-A thanks to Christian translated by Thomas Aquinas
        - Works of Aristotle complimented the Bible
        - · Scientific side of the Bible
        - Thomas Aquinas first medieval monk to find the value in Aristotle's books> first to adapt Aristotle's stories (to make them Christian friendly)
  - Science
    - A very common point of view is that the Middle Ages are a period of stagnation, if not decline
      - The culprit is understood to be the Christian Church
        - Science was seen as evil
      - Would we now live in outer space if it weren't for the M-A?
      - · This is most likely a blatant oversimplification
        - Remember that monks are in charge of preserving knowledge and painstakingly recopying and translating ancient texts!
          - Preserve knowledge not discover new ones
        - · Arrival of universities
          - · To further the study of religion
    - In terms of technology, many significant advances (don't learn all by heart)
      - Agriculture
        - · The heavy ploughshare
          - · Way to till the soil
        - Three crop rotation
          - · Rotation by growing different crops
        - Hops
          - Thing in beer
        - Horse shoes and harness (horse collar)
          - Pull heavy plough shares without strangling themselves
          - Easier to walk long distances
        - Winepress
          - · Make wine and olive oil
          - Basis of printing press
        - Vertical windmill
          - Crush cereal

- · Pump water
- Improved water mill
- Architecture and Construction
  - Medieval Castles > fortification, heavy walls, towers, dungeons, draw bridge
  - Artesian wells > Narrow well that taps into a water source
  - Central heating> hot water the warms houses
  - Rib vaults > efficient building techniques
  - Fireplace and Chimney
  - · Arch bridges
  - · Different types of Cranes
  - Wheelbarrows
- Military Techniques
  - Plate mail armour > body armour
  - Chain mail > can block arrows
  - Stirrups > where you put your feet on horseback
  - Cannons (gunpowder)
  - Counterweight trebuchets > sling shot (better catapult)
  - Crossbows
  - Siege tactics
- · Foreign technologies that seeped into Europe:
  - Arabic numerals (and the concept of "0")> from muslims
  - Algebra (from Muslims)
  - Gunpowder (China)
  - Paper making (China)
  - Compass (China)
  - Stern-post rudder (China) > part of a boat
  - Distillation (Muslim) > to make liquor
- Miscellaneous
  - Oil Paint
  - Hourglass, mechanic clock
  - Blast furnace > furnace reach very very high temperature
  - Watermark > To authenticate pictures
  - Spectacles > glasses
  - Mirrors
  - Forest glass
  - · Spinning wheel, horizontal loom, button
  - Chess
  - Rat traps
  - Soap
- Art
- Middle Ages are a very complex field within Art history difficult to categorize
  - In essence, the history of medieval art is the blending of Classical art (Greek and Roman), early Christian art, and "barbarian art"
- In this art has been disparaged for centuries (since the Renaissance) as being barbaric, narrow-minded, reminiscent of a backward period
  - Art historians are currently rehabilitating medieval art, and interest for this period is developing
  - Most medieval art is closely related to Christianity and is not related to a specific artist!
    - Never know the artist, art related to the church not the artist

- Books that were important were made as works of art > crystals embedded in the cover
- · Frescos on walls and dealings
- Sculptures
- Architecture
  - · Like medieval art in general, architecture is a blend between Germanic and Classical form
    - Pre-Romanesque (Merovingian/Carolingian times)
    - Romanesque (approx. High Middle Ages)
    - Gothic (approx. Late Middle Ages)
  - A lot destroyed during WW2
- Legacy in Western Societies
  - The invention of the "Middle Ages"
    - The "Mediocre Period", the "Dark Ages", the "Barbarian Period", etc
  - · Negative connotation, always implying "Middle"
    - Between glorious era of Greek and Roman Antiquity and the rebirth of this gloriousness, in the Renaissance
  - Why
    - 1200s to early 1400s, an age of crisis
      - · War, famine, death, plague
      - When people thought of the Middle Ages they just thought of the late Middle Age
      - Humanists of the 1400s to 1700s
        - · They decided to forget the Middle Ages
      - · French Revolution and the revolutionary period
        - · Rejected Monarchy and turned to modern forms of politics
        - Felt like they were abolishing the systems of the Middle Ages
        - Medieval came to be an insult
      - This bleak view has stayed with us ever since, but is increasingly challenged by revisionist historian
      - · Cultural elements that shaped the culture of today
- The Name of the Rose
  - Monk William > Renaissance man > ahead of his time, uses rationality
  - The concept of "episteme"
    - "The fundamental body of ideas and collective presuppositions that defines the nature and sets the bounds of what is accepted as true knowledge in a given epistemic epoch"
      - Michel Foucault
      - For each era and each place there are boundaries of what people will accept of being true and what some will accept of being false
      - · Define the world through religion and not science
  - So, what is so different about the monk William, compared to Bernando Gui, or the other monks
    - Rational, looking at the finger with ink and not the devil
  - · How are truths established through rationality?
    - · Look for proofs, things that cannot be argued
  - How do other monks established truth?
    - · Turned to scripture
  - What does that tell us about the medieval episteme?
    - Holy scripture is the only source of truth, if the look somewhere else for truth they are deemed heretics and are tortured and killed
  - What are the consequences of medieval episteme on women?

- Source of sin and evil

- Inherited the patriarchy
  Marie was a vehicle of grace
  What is an epistemic shift?
  The shift from religion to rationality
  Capacity of what people see as true changes