

Thematic Timelines:

Tech and Innovation

Periods 1 – Period 2

Period 1 – Post-Classical Era – 1200 CE - 1450 CE

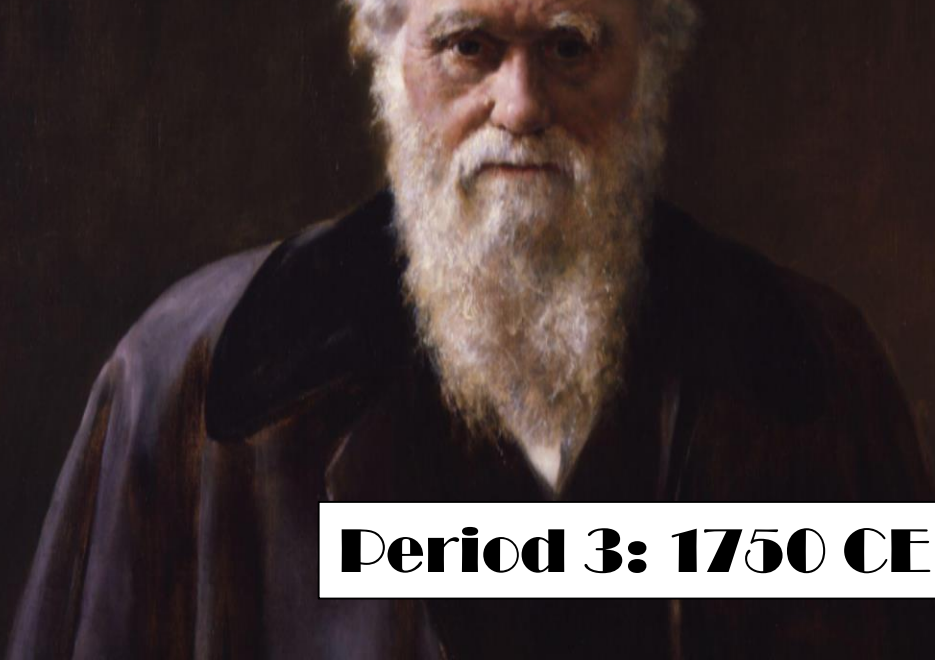
- Use of **Monsoon Winds** and lateen sails allowed for better sea travel and trade
- Communication networks developed in the Americas (Mississippi River Valley, Mesoamerican, and the Andes – Incans)
- Incan road system and state-run economy and mit'a labor system transform Andean society
- Use of caravans aid long-distance trade routes with safety and amount traded
- Compass, stern-port rudders, and astrolabe improve cartography and travel, and junks improve sea trade quantity
- **Bills of Exchange** (caliphates), credit, checks, minting of coins, paper money (Tang China), and banking (Venice) houses improve trade
- Muslim scholars develop algebra using Greek and Indian mathematic ideas and symbols
- Printing press and gun powder tech spread from China to Europe through the Mongols and Dar-al-Islam
- **Nasir al-Din al-Tusi** was a Persian mathematician often considered the creator of trigonometry as a mathematical discipline, the law of signs for spherical triangles, discovered the law of tangents for spherical triangles, and provided proofs for these laws.

Period 2 – Early Modern Era – 1450 CE – 1750 CE

- Portuguese mastery of sea travel and mapping of West Africa begins the **Age of Exploration**
- Caravel improves European trade and travel as Spain, Portugal, and the other Atlantic States discover and map the world in an effort to reach the Indian Ocean Trade Network
- Compass and astrolabe brought to Europe and portolan map scheme developed to aid cartography and travel
- Advanced cannon and cannon ships allow for European domination of sea and the establishment of trade port and maritime empires
- **Price Revolution** and commercialization of agriculture and other goods enrich Europe
- Joint-stock companies, venture capitalism, mercantilism, and charter companies enrich Europeans and European states
- **Atlantic Slave Trade, Triangle Trade**, and the plantation system enrich European states
- Encomiendas and hacienda systems developed in the Americas by Spain and Portugal
- **Chattel slavery** and indentured servitude used in the Americas and for immigration

Thematic Timelines:

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Period 3: 1750 CE – 1900 CE

Period 3 – Modern Era – 1750 CE – 1900 CE

- **Capitalism**, free trade, and Western imperialism develop
- Single-export economies developed to exploit colonies and enrich mother countries
- **First and Second Industrial Revolution** and ALL the tech and classes that come with it
- Mechanization, factory systems, water wheels, spinning jennies, steam engines, telegraphs, telephones, machine guns, breech-loading rifles, steamboats, quinine, petroleum, cars, canned foods, ice box railcars, etc. (see notes for the HUGE list)
- **Socialism** and **Communism** develop as a response to capitalism
- Bacteria and atom theories developed, along with early microscopes
- Stock markets, insurance, the gold standard improve economic growth and activity
- **Darwinism** and **Social Darwinism** developed, resulting in increased Western imperialism

Thematic Timelines:

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Period 4: 1900 CE – Present

Period 4 – Contemporary Era – 1900 CE - Present

- Medical advances in anesthetics, polio vaccines, the artificial heart, antibiotics, and other developments have reduced infant mortality rates and VASTLY increased life expectancy and the world population, particularly in developed nations
- **Green Revolution** - chemical fertilizers, improved irrigation, tractors and other industrial agricultural equipment VASTLY increased agricultural production and VASTLY increase world populations
- Tanks, planes, atomic bombs, trench warfare, firebombing and chemical weapons have been developed and used to VASTLY increase wartime casualties and destruction
- Keynesian economic theories developed as a response to the problems and cycles of capitalism
- **Five-year Plans** developed as an industrializing technique by **Stalin** and used by communist and social states
- Military-industrial complex economic practice developed and utilized by Nazi Germany and U.S.
- Global trade networks and organizations established (**EU, WTO, IMF**, etc.)
- Global organizations were established for peace and aid (**League of Nations and United Nations**)
- TV, freeway systems, commercial airlines, cell phones, the internet, and smart phones have made communication, travel, and economic exchange far easier and cheaper