Cartography in the Dawn of the Printing Press
Babylonian tablet/map
Islamic map of the Zodiac
Aristotle had an idea of an ordered universe with an earthly and heavenly region—which was immutable and perfect.

Centermost in this cosmology was the earth, then the elements, then the planets, then stars—including the signs of the Zodiac. This cosmology was eagerly adapted to fit Medieval theology with God and heaven.

Christ Holding the Universe. Aristotle, *Works on Natural Philosophy.*
630 world map by St. Isidore, Bishop of Seville
1260 Psalter map
c. 1376 *Creation of the World*, Giusto de Menabuoi
14th century *Breviari d'Amour*, Mattre’ Ermengau of Beziers
1460 Simon Marmion’s world map
15th century Sphaera Mundi, Sacrobosco
Sculptor nova arte, bracteata in lamina
Sculpit figuram, atque praebi primit.
More than 50 editions of Ptolemy’s *Guide to Geography* appeared in cities all over Europe between 1475 and 1730 in a variety of forms. Some of the volumes were lavish for wealthy patrons, while others were more modest for wider circulation. The *Guide* was a technical listing of 8,000 places using latitude and longitude coordinates.
Ptolemy developed a simple plan to have straight lines of longitude converge at the North Pole in his conic map projection. On his pseudo-conic or spherical projection, the lines of longitude curve toward the pole. This was a more difficult projection to construct but gave a more accurate result.
Ptolemy’s maps did not survive, but he provided the key to successful mapmaking using coordinates and math. The best Renaissance cartographers worked on *The Guide*—a publishing phenomenon that allowed scholars to work on an old theme while developing new twists: new projections, new maps, new ways of looking at the world.
1542 Andrew Borde’s Ptolemaic universe from The First Book of the Introduction of Knowledge
1493 Nuremberg Chronicles “Creation of the World” in Hartmann Schedel, Das Buch der Croniken, Anton Koburger
1660 Andreas Cellarius from the star atlas, *Atlas Coelestis Seu Harmonia Macrocosmica*
1661 Andreas Cellarius’ Ptolemaic Planisphere from *Harmonia Macrocsmica*
1708 Andreas Cellarius’ engraving of an armillary sphere from *Harmonia Macrocsmica*
1667 J.W. Blaeu’s Ptolemaic system from Geographia
1524: In his book *Cosmographia*, Petrus Apianus made a distinction between cosmography and geography. Cosmography was the study of the universe; geography was the study of the earth. The book included subjects now called astronomy, geography, surveying, navigation, and instrument making.
1543: Copernicus published his book *De Revolutionibus Orbium Coelestium* (*On the Revolutions of the Heavenly Spheres*), in which he proposed that the sun, rather than the earth, was the center of the universe.

This actually made calculations on the positions of planets easier to perform.
1708 Cellarius atlas
1708 Cellarius atlas
16th century map of the planetary orbits from *The Celestial Atlas* by Tycho Brahe (1546-1601): Mars and the sun intersect; all planets except earth revolve around the sun; the sun revolves around the earth.
Dialogo di Galileo Galilei Linceo matematico sopraordinario dello studio di Pisa.
E Filosofo, e Matematico primario del serenissimo granduca di Toscana.

Due nei congressi di quattro giornate si discorso sopra i due massimi sistemi del mondo tolemaico e copernicano,
Propomendo indeterminate le ragioni filosofiche e naturali tanto per l'una quanto per l'altra parte.

Con Pri Vilegl.

In Firenze, per Gio. Batt. Landini MDXXII.
Con licenza dei Supersori.

1632 Dialogue Concerning the Two Chief World Systems by Galileo.
Leonardo da Vinci (1452-1519) is believed to be the cartographer of this plan of the town Imola, which is also a military map.
1475: Lucas Brandis map of Palestine
c. 1480: Hans Rust woodcut—rare printed mappamundi
1534: hand-colored woodcut of *A New and Complete Description of the World* by Oronce Fine created for King Francis I of France reflects the merger of Ptolemaic traditions with recent voyages of discovery. The term “Terra Australis” is introduced.
c. 1556 from Cosmographie Universelle by Guillaume Le Testu (manuscript) from the Dieppe school of cartographers in Normandy
1544: Sebastian Munster published his *Cosmography* with 520 woodcut maps and illustrations. By 1550, there were 910 woodcuts and 1,233 pages. For most of the 16th century, it was one of the most important sources of geographical, historical, and scientific knowledge with maps of the world, regional maps, and city views.
1550 Munster map of Europe
1558 Diego Homen’s *The British Isles and Western Europe*
1569 Mercator map
1619 Gerardus Mercator published volumes of atlases beginning in 1538. His map projection was one of the most popular, and his books were less artistic and more serious and modern. (Mercator unfortunately copied the island of Frisland from a faked medieval map from 1558).
1570: The first true modern atlas: Ortelius’ world map in the first edition of the Theatrum Orbis Terrarum includes the Americas, although their size and shape are obviously distorted.
1572: The first city atlas was *Civitates Orbis Terrarum* (*Cities of the World*) published by Georg Braun and Frans Hogenberg in Cologne, Germany. In all, 46 editions of the atlas were published in Latin, German, and French.

(Strassburg)
(Seville)
1579: Monmouthshire from the Atlas of England and Wales, Christopher Saxton
1580 Gallery of Maps at the Vatican, Egnazio Danti
1587 John Hooker’s map of Exeter, engraved by Remigius Hogenberg
1596 *Typus Totius Orbis Terrarum* by Jodocus Hondius (Christian knight resembles King Henry IV of France, a Protestant ally to Dutch Protestants against Catholic Spain—Vanity, Sin, Carnal Weakness, the Devil, and Death)
1611 Cambridgeshire by John Speed, London (Theatre of the Empire of Great Britaine)
1620 “Pauluskarte” from an atlas of the Archbishopric of Cologne by Johannes Michael Gigas
1658 Johannes Vermeer’s *Soldier and Laughing Girl* featuring a map of the provinces of Holland by Floris van Berkenrode (1621)
1660 Klencke Atlas (consortium of Dutch merchants presented to King Charles II)
1662 *Atlas Maior* by Joan Blaeu reflects the extent of contemporary geographical knowledge.
1664-1724 Johann Baptist Homann, Nuremberg
c. 1755 William Roy map of Scotland (Paul Sanby watercolor)
1941 German map of ethnic groups of Slovakia
1944 Army Map Service
ESRI elephant poaching
2015 Je Suis Charlie
Secy Gates meeting with Israel's Minister of Defense Ehud Barak