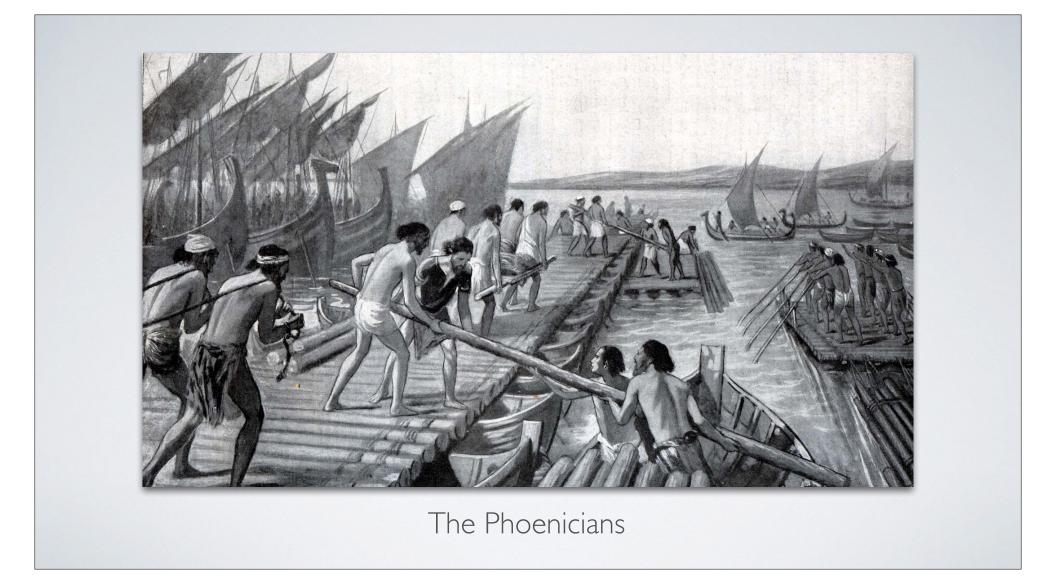


- The first sailing vessels (3000 B.C.) were powered by wind
- Sails were an important discovery because they allowed for faster and further travel offshore and opened oceans and seas for trade



- The Phoenicians (2000 B.C.)
 - Earliest skilled ocean traders
 - By 700 B.C. they sailed around Africa
 - By 150 B.C. sailed north as far as Great Britain
 - Accurate maps were created by Ptolemy based on Phoenician's observations



- The Vikings (700 I 200 A.D.)
 - Extremely successful even during the dark ages
 - Origin was present day Norway, Sweden, and Denmark
 - Plundered much of Europe and sailed as far as North Africa and North America





- The Vikings (continued)
 - Ship design was far superior to anything else afloat at the time
 - Ships were 45-90 feet in length and powered by sail and oar
 - Flattened bottoms which allowed them access to shallow waters







- The Vikings (continued)
 - Leif Eriksson and the Vikings are now credited as the first europeans to discover North America
 - Exploration for the Vikings ended with the dark ages when a rebirth in ocean exploration began





• Columbus (1451 - 1506)

- Italian explorer who was thought to be the first explorer to discover the America
- Columbus is now credited as the explorer to establish permanent settlements in the America with his four voyage across the Atlantic Ocean

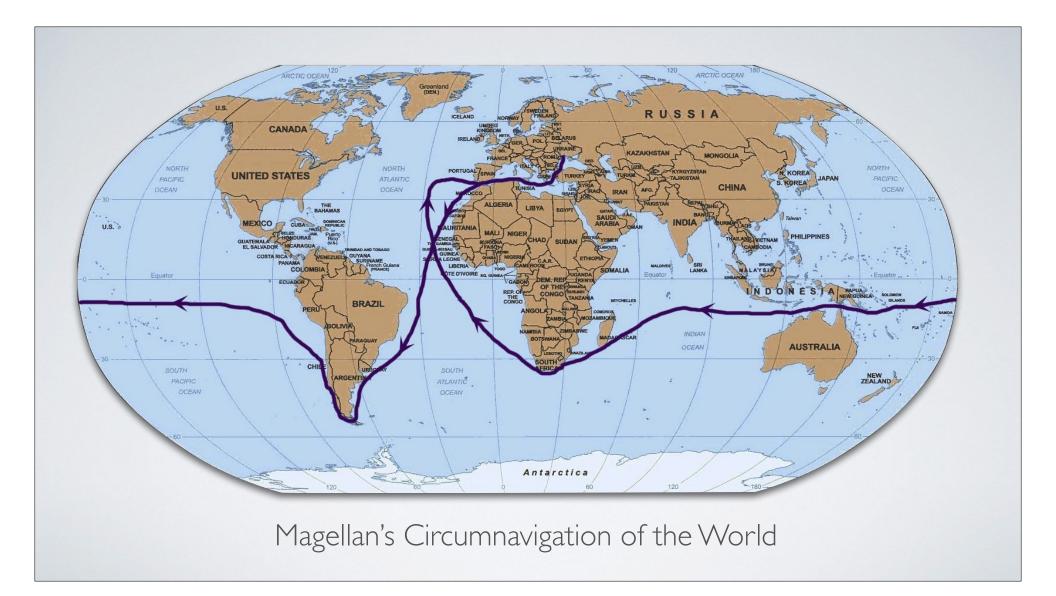


- Balboa (1475 1519)
 - Spanish explorer (Conquistador) who was the first to crossed the isthmus of Panama (by land) and see the Pacific Ocean
 - <u>Isthmus</u>- small stretch of land that separates two large bodies of water



- Magellan (1480 1521)
 - Portuguese explorer who was the first to circumnavigate the world
 - <u>Circumnavigate</u>- to sail all the way around





- Magellan (continued)
 - Sailed west with five ships and 290 men
 - Three years later one ship and 18 men returned to Spain
 - Magellan was killed in the Philippines and did not return
 - Most of the crew was killed during mutinies or died from disease or shipwrecks





- Verrazano (1485 1528)
 - Italian explorer who explored the coast of North America from Massachusetts to Georgia



- Cartier (1491 1557)
 - French explorer that raveled along the St. Lawrence River and the eastern coast of Canada





• Henry Hudson (1565 - 1611)

• English explorer that traveled and mapped the Hudson River





• Each of these explorers undertook dangerous journeys resulting in amazingly accurate maps of the regions which they explored

