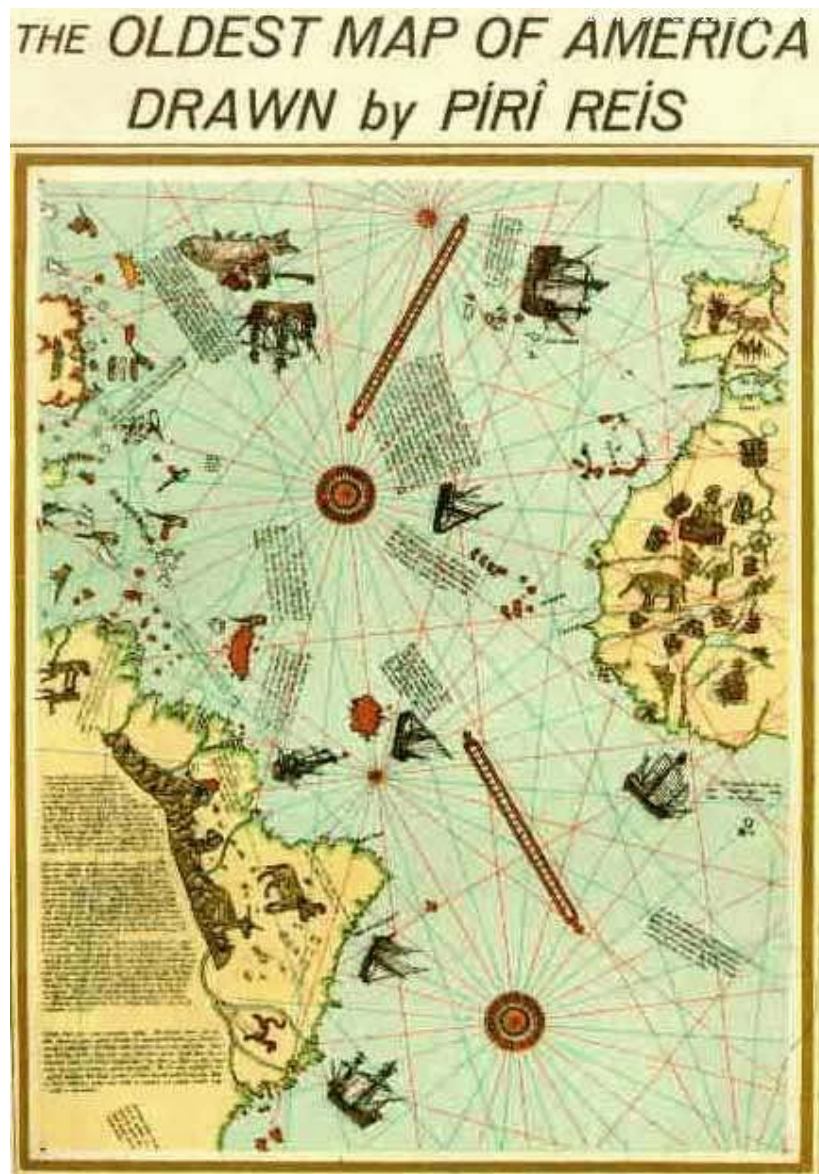


## Cmod # 5 Ancient maps

In the past 80 years a number of sensational maps have been discovered that should revolutionize our understanding of world history. These extraordinary maps are almost totally ignored, however, because they disagree with the politically-correct and liberal views of most educators. Along the same lines, school textbooks are more concerned about political correctness (ideology) than about truth. As a result, they are unlikely to publish the maps.

One such map is the remaining western one-third of a world map drawn by Muslim cartographer (mapmaker) Piri Reis in 1517. The map was discovered in 1929 while the Topkapı Palace in Istanbul, Turkey, was being converted into a museum.

### [Piri Reis Map](#)



This map is the only surviving map of the 16<sup>th</sup> century which shows South America in its proper longitudinal relation to Africa. Reis said this map was based on 20 source maps, some going back to the time of Alexander the Great (330 BC). There is no serious question about the authenticity of this map.

The map shows the western portion of Africa and the Easter portion of South American in considerable detail and with an extraordinary degree of accuracy. North America, in contrast, is drawn with little detail and is largely inaccurate. Reis said that he relied on the maps and accounts of Christopher Columbus in drawing North America.

The big question regarding the map is this: How could Reis, in 1517, have drawn the coast of South America with such accuracy and in so much detail? The explorations of Europeans by that time were far too meager to account for this information. Where did it come from?

The most reasonable explanation is that earlier civilizations had engaged in extensive sailing between Africa and South America and had recorded and mapped their explorations. Reis apparently had some of this information on one or more of the source maps or other documents at his disposal.

An important clue as to the identity of such civilizations lies in the fact that the Reis map is a grid projection with its point of origin in Cairo, Egypt. The Phoenicians, who were the most advanced people regarding oceanic navigation at the time of Alexander the Great, were located in Northern Africa as well as on the coast of the Middle East. They worked closely with the Egyptians at that time. The Phoenicians would be the leading candidates regarding the most important sources of information Reis had for mapping South America. Other civilizations, however, including the Chinese, Hebrews, Greeks and Romans also engaged in extensive oceanic navigation long before 1517.

The map is extraordinarily significant, however, because it demonstrates that ancient peoples, likely from the Middle East and Northern Africa, and perhaps elsewhere, were routinely sailing to South America and doing extensive exploration and mapmaking of this continent—long before Christopher Columbus sailed to America. Such ancient peoples must have been far more sophisticated in their mapmaking and sailing abilities than they have been given credit for in our time. (Additional evidence for this conclusion follows below.)

The following website ([click here](#)) is recommended for more information on the Piri Reis map.

### **The Oronteus Finaeus Map**

A second highly significant map was found in the Library of Congress, Washington DC, in 1960 by Charles Hapgood. It was drawn by French cartographer Oronteus Finaeus in 1531. Finaeus, like Reis, was a well known historical figure and was an expert in cartography, astronomy, mathematics and military weaponry. Antarctica is clearly shown on this map, and it is pictured as being largely ice free with flowing rivers and a clean

coastline. Some of the mountain ranges pictured on the map have only been recently discovered. Photographs of the map can be found on numerous websites; one such photograph appears below:

[The Oronteus Finaeus map of 1531](#)



The Finaeus map pictures the globe from the perspective of the South Pole. (The other half of the map, which is not shown, pictures the globe from the perspective of the North Pole.) Continents and islands clearly pictured on the map include Antarctica (center), South America (lower right), Africa (lower left), Madagascar (left of center) and Australia (upper left). Again, no serious questions have been advanced concerning the authenticity of this map.

There are numerous sensational features of the map—one of them being the fact that it obviously pictures Antarctica, and did so long before it was “discovered” in 1820. Also significant is the fact that much of Antarctica is depicted as being largely free of ice. This means that at least some of the source maps were drawn before the mile-thick ice cap had formed. This is really not all that surprising because another map, the famous Zeno map of the North Atlantic (1380 AD), pictures Greenland as being ice-free. Obviously various source maps had been drawn when the globe was much warmer than it is today.

It is additionally recognized that the Finaeus depiction of Antarctica is extraordinarily accurate—so much so that modern mapmakers are mystified as to how it could have been drawn with such amazing accuracy. Obviously the map-making ability of earlier people (perhaps the Phoenicians), including their abilities in mathematics and geometry, was far superior to what has been imagined.

The map demonstrates that Antarctica had been extensively explored and mapped long before it was even known to the Western world. Because it had been extensively explored, it is possible, perhaps probable, that people had been living there, at least on the coast which would have had a more moderate climate than inland.

There are other significant implications of the Finaeus map. Since Antarctica was obviously much warmer when the source maps were drawn than it is today, the notion that Antarctica has been covered with a mile-thick ice cap for at least one million years must be given up. Also in trouble is the belief that the age of the earth and the timing of various events can be established by means of Antarctic ice cores. In addition the highly politicized view that the Earth is now the warmest it has ever been must be abandoned because it has been proven false. Man-made carbon dioxide is obviously not the primary cause of climate change.

### **Mapmaking abilities in the First and Second Centuries AD**

Could civilizations going back to the time of Alexander the Great (330 BC) have been able to sail to South America, Antarctica and even to Australia and make accurate maps of their discoveries? This question is actually not difficult to answer because various historical accounts demonstrate that Mid Eastern people of that time possessed the knowledge necessary for the mapmaking and sailing abilities that would allowed them to engage in the necessary cartography and exploration.

One of the earliest known authorities on mapmaking was Claudius Ptolemaeus (referred to in the West as “Ptolemy”) who lived from about A.D. 85-168. Ptolemy was a mathematician, astronomer and geographer. He lived in Egypt under the Roman Empire, and is believed to have been born in the town of Ptolemis Hermiou in the Thebaid. He died in Alexandria around AD 168. Alexandria, located in Northern Africa, had long been a center of science and recorded information regarding nautical maps, geography, mathematics and history.

## [A medieval artist's rendition of Claudius Ptolemaeus](#)



Ptolemy wrote a monumental work on mapmaking, *Guide to Geography*, also referred to as *Geographia*, in about 150 AD. *Geographia* was lost to most of the civilized world for more than one thousand years, however, until it was re-discovered around 1300 AD.

One of the many significant contributions of Ptolemy's book is that it describes longitudinal and latitudinal lines and how they are drawn. The book identifies the location of numerous geographical sites by means of those lines. The book additionally specifies how important locations can be accurately placed on maps containing those lines by means of celestial observations. That is, the book explains how accurate maps can be made and how to navigate based on those maps by means of celestial navigation which relied on the perceived locations of the sun, moon, planets and stars.

When Ptolemy's *Geographia* was translated from Greek into Latin in Western Europe in 1406, its global coordinate and navigational system totally revolutionized European sailing and mapmaking abilities—putting them on a previously unknown scientific basis. The knowledge that Europeans gained from Ptolemy was absolutely necessary for the explosion of exploration and cartography by Europeans beginning in the 15<sup>th</sup> Century.

Ptolemy made no claim to have invented the system described in his books, but wrote that he had relied mainly on the work of an earlier geographer, Marinus of Tyre (70-130 AD), a Phoenician cartographer. Marinus was the first person known to have assigned a specified latitude and longitude to various geographic locations, although he may have been borrowing from other as well. He said that he carefully studied the works of earlier cartographers as well as the diaries of various travelers. His maps were the first we know of in the Roman Empire to show China. The text of his geographical treatise, however, has been lost. He is credited with having invented the equirectangular projection, which is still used in map creation today. Ptolemy claimed that Marinus invented the projection about 100 AD. Marinus is credited with coining the term “Antarctic” which means opposite of the Arctic.

The ancient city of Tyre, home to Marinos, was a prosperous sea port at his time and continued so for several centuries afterward. In the fourth century AD, St. Jerome spoke of Tyre as having once again become the richest and most splendid trading city of the East. The sea captains and cartographers from Tyre would have had the knowledge Marinos described to assist them in their ventures—both in navigating and in mapping their explorations. This knowledge would have allowed them to sail most anywhere in the world, just as it also allowed the Europeans to do so once they too acquired it in the 15<sup>th</sup> Century, knowledge the Phoenicians had in the 2<sup>nd</sup> Century AD at the latest, if not before.

### [Ruins of ancient Tyre](#)



Tyre had been an enormously successful sea port long before the 2<sup>nd</sup> Century AD. The prophet Ezekiel (585 BC) described Tyre's success in terms similar to those of St. Jerome. Solomon (950 BC) had a working relationship with Tyre. I Kings 10:22 informs us that with the help of the Phoenicians, Solomon had a fleet of ships that returned once every three years—a long time at sea. Solomon's ships could have made extensive voyages over three year expeditions.

I Kings 9:27 states that Phoenician King Hiram supplied some of the sailors for those ships which would likely have included Phoenician maps, instruments and expertise. In exchange, Solomon gave the Phoenicians access to the Red Sea which allowed them to sail east to China and elsewhere without going around the Southern tip of Africa. This arrangement allowed the Phoenicians ready access to the Indian and Pacific Oceans to the East. They already had access to the Atlantic Ocean to the West; critical factors in their seafaring success. I Kings 9:28 says that with the help of the Phoenicians, Solomon's navy brought him gold from Ophir, commonly thought to be India or Pakistan (950 BC)..

### [The Library at Alexandria](#)

The Library at Alexandria was the first known library to gather a serious collection of books from beyond its country's borders. It is thought to have been founded by a student of Aristotle. Alexander the Great was another student of Aristotle. The library was charged with collecting all of the world's knowledge. It did so through an aggressive and well-funded royal mandate involving trips to book fairs such as those at Rhodes and Athens and through a policy of pulling the maps and books off every ship that came into port as the price for doing business in the city. They kept the original texts and made copies to send back to their owners. A man-made bidirectional port was located in Alexandria, between the mainland and the Pharos Island, which was instrumental in making Alexandria an international hub for trade in addition to it being a center of scholarly information and a leading producer of papyrus (paper) and books.

### [The Library at Alexandria \(artist's rendition\)](#)



Other than collecting works from the past, the library was also home to a host of international scholars. As a research institution, the library filled its stacks with works in mathematics, astronomy, physics, natural sciences and other subjects. This library had one of the best collections of navigational maps in the world at that time, probably the best. It also had superb collections of information about cartography, mathematics, science and nautical navigation.

The Library at Alexandria was burned by the Romans in 48 BC. There were, however, three libraries in Alexandria, not just the one that was burned. The other two libraries continued, in at least some form, until they were destroyed by the Muslim invaders in 642 AD. The main library had also been restored to some extent up until the time the Muslims took control of Alexandria.

Several historical accounts say that when the conquering Muslims asked their ruler, Caliph Umar, what to do with the many thousands of books in the libraries at Alexandria,

he is said to have responded by saying, "They will either contradict the Koran, in which case they are heresy, or they will agree with it, in which case they are superfluous." The Arabs reportedly then burned the books to heat bathwater for the soldiers, and it was said that the Library's collection provided six months' worth of fuel for the baths. As a consequence, the knowledge housed in those libraries was largely lost to much of the world, some of it to be recovered many centuries thereafter.

It is not surprising that Ptolemy would have spent much of his professional life in Alexandria. He there would have had access to the best information of his day on numerous subjects, including cartography and navigation, as well access to numerous maps of various parts of the globe along with written accounts of sailing expeditions of all kinds. Information of this breadth and quality only began to be known to Europeans during the 15<sup>th</sup> Century—1300 years later.

### **Phoenician ships**

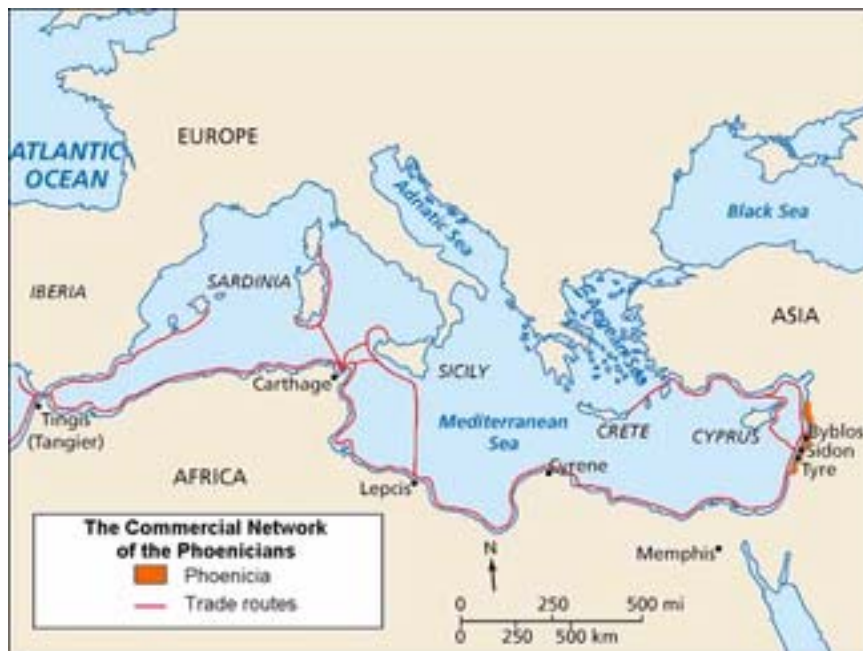
The Phoenician civilization was a maritime trading culture that spread across the Mediterranean during the period 1550 BC to 300 BC. The Phoenician exploits continued for half a millennia after that, while under Roman rule. The city of Tyre was its most prominent port city, but the one-time Phoenician colony of Carthage also became one of its most important port cities until its destruction by Rome in 146 BC.

The Phoenicians were famous metalworkers, and by the end of the 8th Century BC, Greek city-states were obtaining most of their metal goods from them. Greek coastal cities are rich with artifacts of Phoenician imports that evidence this trade. Much of the tin for the metal trade was mined in modern-day England.

The Phoenician alphabet was adopted by most of the other civilizations. The Greeks did so no later than the 8th century BC. This spread of the Phoenician alphabet may well have been the result of the ongoing commercial and cultural exchange between the Phoenicians and other peoples.

There are numerous historical and artistic references to the Phoenician dominance of maritime trade and exploration. The Greek Historian Herodotus, for example, records that in 600 BC Phoenician mariners achieved the first circumnavigation of Africa. This feat took place more than 2,000 years before Columbus set sail for America. The Phoenicians developed their navigational skill even further after that time. The Phoenician port city of Tyre dominated trade in the Mediterranean and established numerous colonies, most being on the coast of the Mediterranean Sea, but some being on the West Coast of Africa.

## Phoenician trade routes in the Mediterranean Sea



Phoenician vessels were mainly of two kinds, merchant ships and war-vessels. The merchant ships were of a broad, round make, resembling the Dutch fishing boats of a century ago. They were propelled both by oars and sails, but depended mainly on the sails. Early ships had a single mast of moderate height, to which a single sail was attached. Later ships had two sails. If the wind was not favorable, the crew got out the oars. These ships were somewhat similar to the Viking long boats which are known to have been in North America around 1,000 AD.

**Photograph of a Phoenician replica ship made by the Phoenician Ship Expedition.**

(This group intends to circumvent Africa with this ship beginning in the summer of 2009)



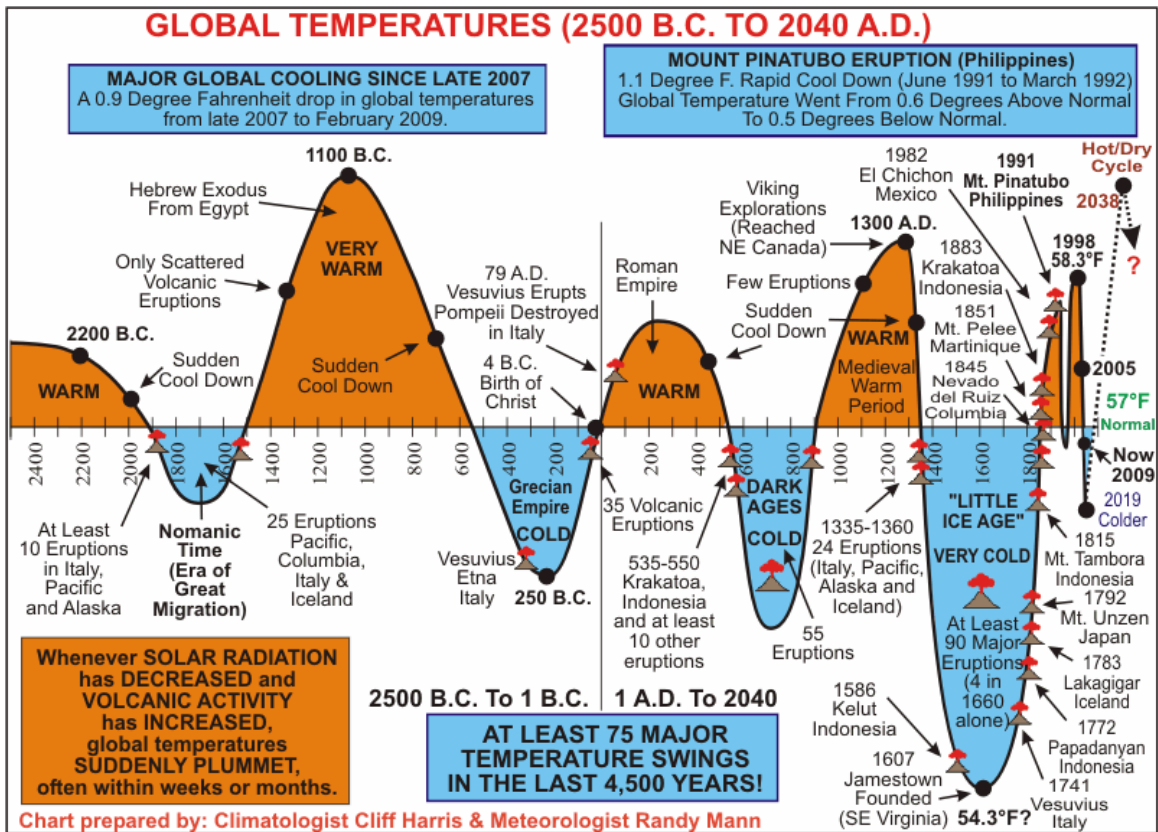
Were the Phoenicians capable of sailing this kind of ship to South America and points beyond? It would appear that they were and for the following reasons. First of all, the distance from Africa to South America is only half the distance Columbus sailed from Portugal to North America.

Secondly, that distance from Africa to South American is only one-tenth the distance involved in circumnavigating Africa, a feat we know the Phoenicians had achieved in 600 BC. .

Thirdly, hurricanes are virtually unknown south of the equator, so sailing to South America would not have been particularly hazardous. And, unlike Columbus, when the Phoenicians lacked a favorable wind, they would row, as did the Norwegian Vikings, who were also in the Americas long before Columbus.

And, most importantly, we know that the Phoenicians had the information and expertise that would have allowed them to sail to the New World and beyond. This same information allowed the Europeans in the 15<sup>th</sup> and 16 centuries to begin to accomplish what at least one other civilization had accomplished long before. Do we know it was the Phoenicians? We do not—but they are clearly the leading prospect.

(It should be noted that the earth was relatively warm from before 2500 BC to 500 BC, over 2,000 years, as can be seen from the following chart. This fact may explain why Antarctica and Greenland were largely ice-free toward the end of that time period. The earth was also warm at the time of Ptolemy (150 AD) and when the Viking settled Greenland and Newfoundland (1,000 AD).



[\[Link here.\]](#)

## Sample Lesson Plan

**Grade levels:** 7-12 and college level. College students should also research the Punic wars between Rome and Carthage and should be familiar with other ancient maps including the Bauche map (1739) and the Waldseemuller map (1507).

### Objectives:

Students will:

1. Learn the factual information relating to the Piri Reis and Oronteus Finaeus maps.
2. Begin to be equipped to make needed revisions of history based on reliable factual information.
3. Begin to understand the basic principles of cartography.
4. Begin to understand the principles of navigation in earlier times.
5. Recognize the barriers that political correctness erects for historical research and historical writing.
6. Begin to understand the cyclical nature of climate and climate change.
7. Begin to understand the importance of astronomy to earlier navigation.

### Materials:

1. Overhead projector and slides or power-point technology.
2. Student access to the internet.
3. A globe and various maps.

### Procedures:

1. Teachers may wish to lecture on this information or may assign students to the information and resources included on the CMods webpage.
2. Students may engage in research or other projects intended to answer the following questions:
  - a) How does modern GPS technology make use of the framework described by Ptolemy in 150 AD?
  - b) How could navigators at the time of Columbus determine their location on the globe? How accurate were they?
  - c) How is the Viking colonization of Greenland in 1,000 AD and following related to the ancient maps showing Antarctica?
  - d) What evidence exists to verify the Viking settlement of North America in 1,000 AD? (See Cmod # 6.)
  - e) Can it be argued that Antarctica is the lost civilization of Atlantis? Explain the arguments for and against.
3. Teachers may wish to ask the following question: One of the primary rules of historical research is giving the benefit of the doubt to the documents themselves, absent convincing evidence to the contrary. How does that principle apply to the ancient maps?

### Vocabulary:

**Celestial navigation:** determining one's position on the globe by means of angular measurements between common celestial objects or to the horizon. The Sun and the horizon were most often measured, but the Moon, planets and one or more of 57 navigational stars were also used, their coordinates having been tabulated in nautical almanacs. Besides nautical tables, a sextant and a method of keeping time were required to determine position using this method.

**Fact:** as in a fact of history, is a statement that can be checked and either confirmed or denied. Facts are often contrasted with opinions and beliefs which may be true but are not subject to verification to the same degree as are facts. Fact may also indicate findings derived through a process of evaluation, including review of testimony, direct observation, or otherwise, as distinguishable from matters of inference or speculation. What had been thought to be facts are sometimes proven false.

**Latitude:** the location of a place on Earth north or south of the equator. Lines of latitude are the horizontal lines shown running east-to-west on maps parallel to the equator. Technically latitude is an angular measurement in degrees (marked with °) ranging from 0° at the equator (low latitude) to 90° at the poles (90° N or +90° for the North Pole and 90° S or -90° for the South Pole).

**Longitude:** location of a place in terms of east-west measurement. A line of longitude is a north-south meridian and half of a circle. Unlike latitude, which has the equator as a natural starting position, there is no natural starting position for longitude. Therefore, a reference meridian had to be selected. It was a common practice in the past to use a nation's capital as the starting point, but other significant locations were also used. In 1884, the International Meridian Conference adopted the Greenwich meridian in London as the universal prime meridian or zero point of longitude. The Greek letter  $\lambda$  (lambda) is used to denote the location of a place on Earth east or west of the prime meridian.