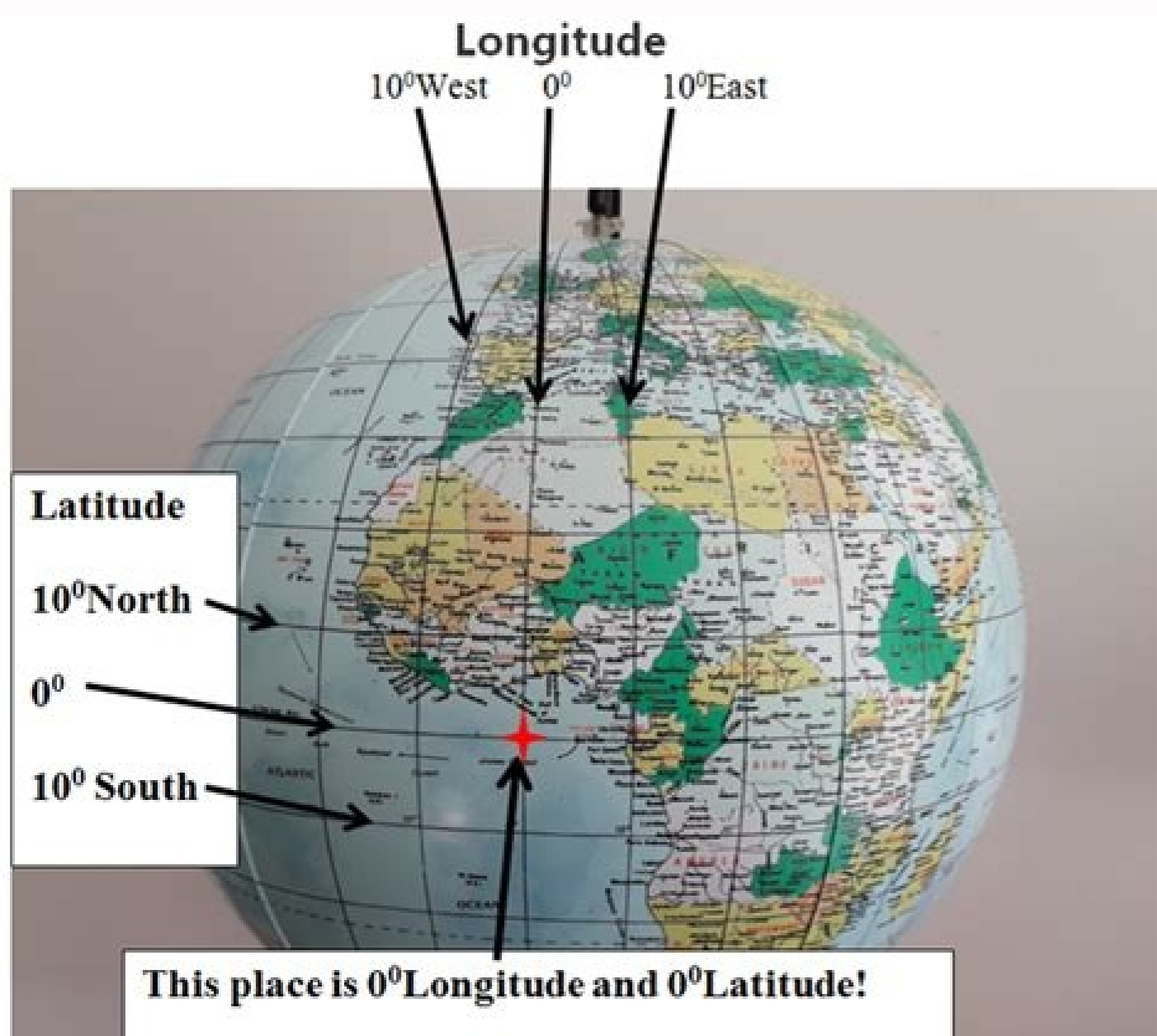
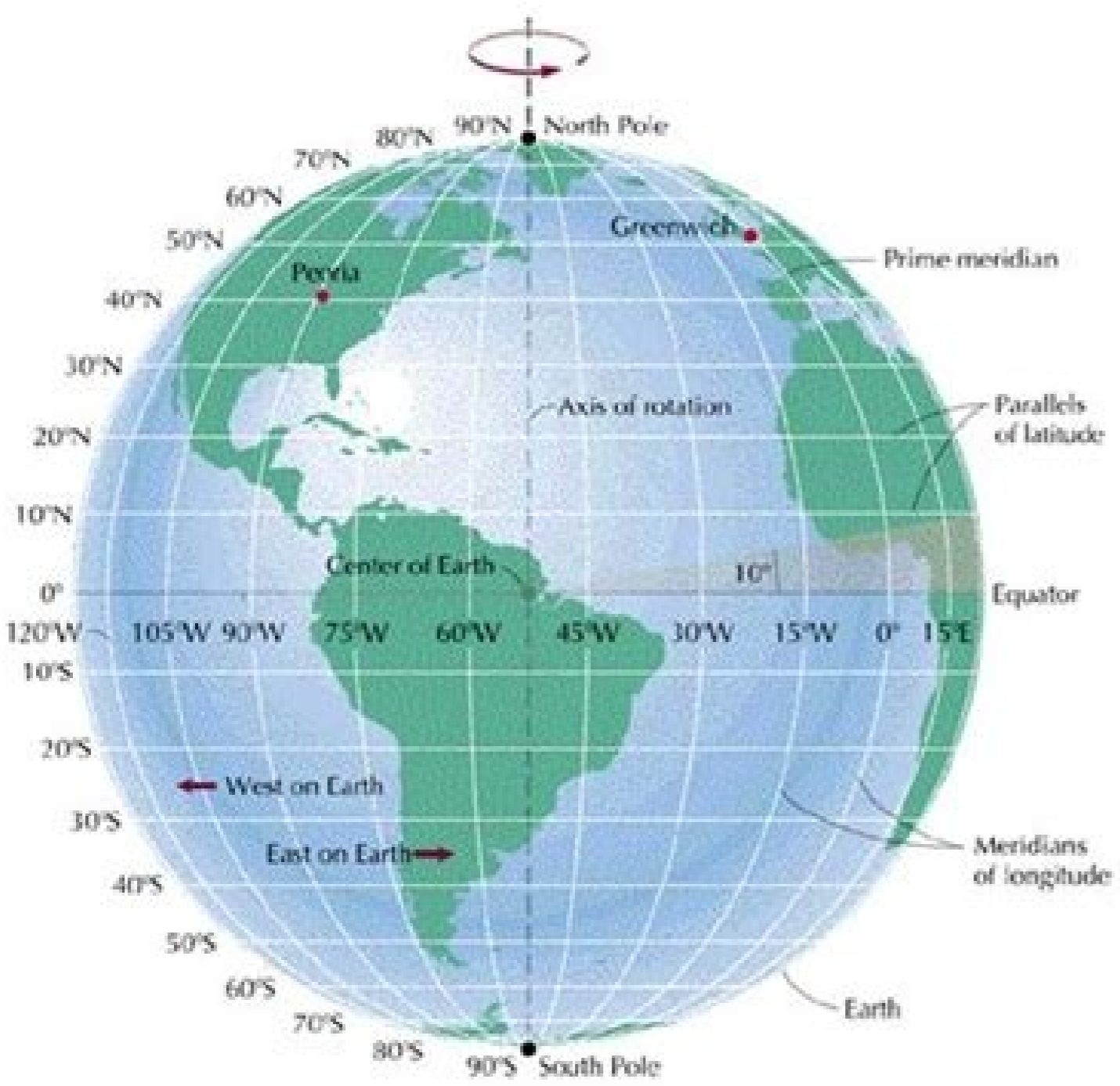
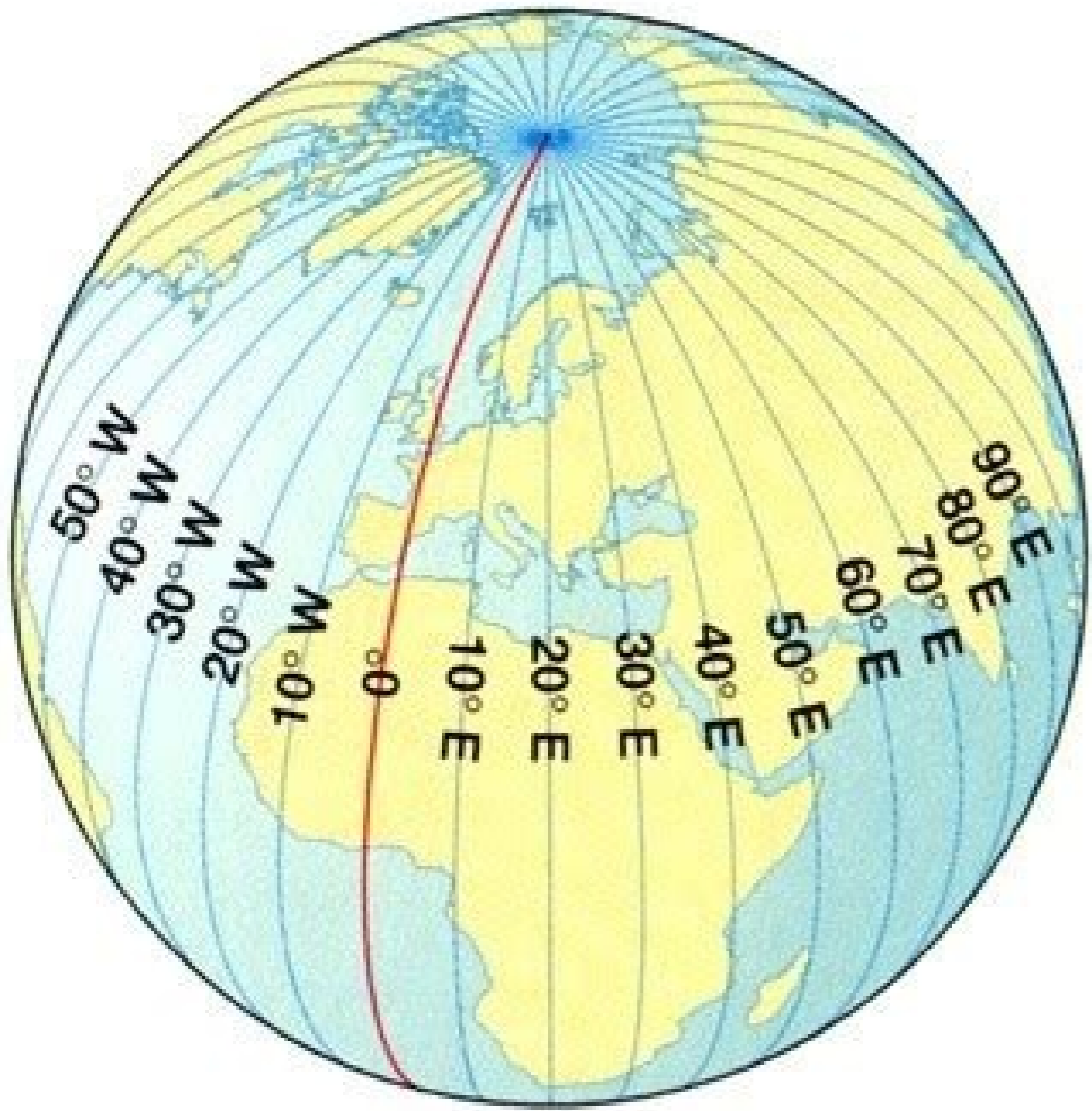
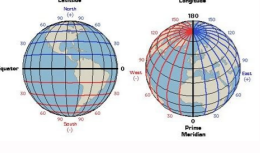
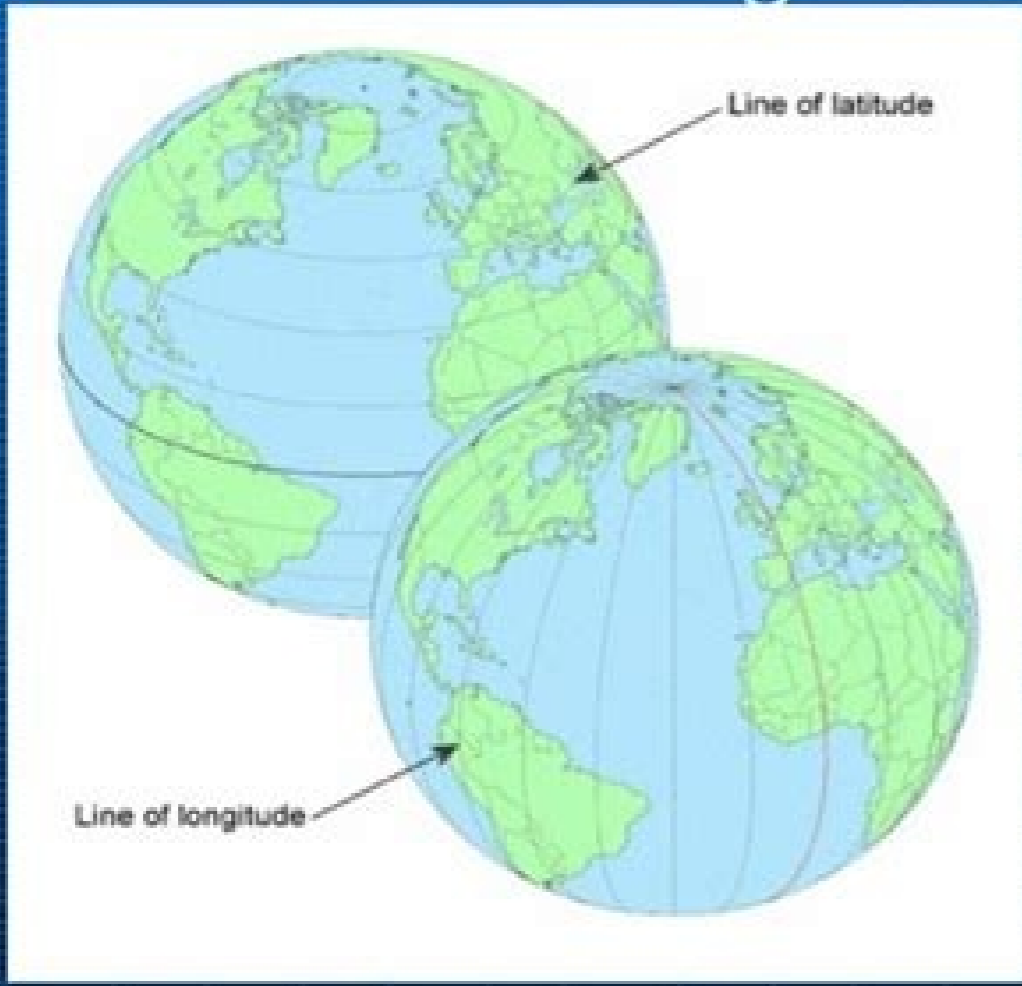


What does longitude

Continue

Latitude and Longitude



What way does longitude go. What time does longitude end tonight. What time does longitude start 2022. What time does longitude finish. What time does longitude end. What direction does longitude run. What time does longitude start. What time does longitude start 2021.

Learn what latitude vs. longitude is to get a clear understanding of what these two terms mean and what they measure. Figure out what latitude and longitude mean in a clear way through examples. latitude versus longitude definition
If you've ever looked at a GPS, you might notice latitude and longitude. But what does that mean? Latitude is the points north and south of the equator.Longitude is the points east and west of the prime meridian. Still not clear? Think of latitude and longitude as an imaginary grid placed over the world to help you find places. The equator is halfway between the North and South Poles. It's an imaginary horizontal line that cuts the planet completely in half. Latitude lines are imaginary lines a specific degree away from the equator going to the North and South Pole. Like the equator, the prime meridian is an imaginary vertical line that splits the world in half from the North to the South Pole. Longitude is vertical lines going from one pole to the other starting at the prime meridian. Now that you know the definition of latitude and longitude, explore a few differences and similarities between these two.
Term:latitudeLongitudeDefinition:north and south of the equator:east and west of the prime meridianKnown as: parallelsmeridiansRange: 0 to 90 degrees north and south0 to 180 degrees east and westDistance from: equatorprime meridianLines It Has on Globe: 180360Greek Letter: phlambda
When it comes to lines of latitude, it's all about the equator. These parallel lines follow the line of the equator and go from the equator to the North Pole and from the equator to the South Pole at an equal distance, which is why they are called parallels. Latitude lines progressively get smaller and smaller until they get to the North Pole and the South Pole. To see why this is, you could put parallel lines horizontally on a ball. You'll notice that as you get closer to the top, the lines you create get smaller and smaller because the ball is thickest at the middle and gets thinner as you. Latitude is measured using degrees, minutes and seconds (DMS), one degree is 60 minutes and 1 minute is 60 seconds. Lines of latitude are measured in degrees from 0 to 90 degrees. As you might guess, the range is 0 at the equator and 90 at the North Pole and the South Pole. Latitude can either be negative (S) or positive (N). It can also be calculated in all positive numbers and denote N or S. Some examples of latitude include: The Tropic of Cancer - 23.5 degrees NThe Tropic of Capricorn - 23.5 degrees SThe Antarctic Circle - 66.5 degrees SThe Arctic Circle - 66.5 degrees N
While the lines of latitude are parallel, the lines of longitude are not. Lines of longitude are similar to wedges of an orange. The lines of longitude run from one pole to the other in perfect wedges. These lines run up and down the Earth, creating the vertical lines of the grid. Since everything has to start somewhere, lines of longitude start at the prime meridian. The prime meridian runs through Greenwich, England, and goes until it reaches the antimeridian, or International Date Line, which is halfway around the Earth. Lines of longitude are measured in degrees from 0 to 180 degrees running east and west. Like latitude, longitude is measured using degrees, minutes and seconds (DMS). The prime meridian is 0 degrees, and the antimeridian or International Date Line is at 180 degrees. When you cross the Internation Date Line, the day magically changes with the west being one day ahead of the east. Longitudes are also positive (E) and negative (W) or denoted as E and W. Knowing what latitude and longitude are is only half the battle. Remembering which one is which of these L words can be more difficult. When thinking of latitude think ladder. Latitude runs horizontally across the earth like the rungs of a ladder. To remember longitude, think about long. Something that is long runs vertically up and down. You can even use this fun phrase. Latitude is fatter running across like a ladder. Don't go wrong by remembering longitude is long. Latitude and longitude make GPS possible. When it comes to coordinates, they are measured in latitude and longitude using degrees. GPS is needed for meteorologists to accurately measure weather. Explore more about weather by looking at common types of weather.
Staff Writer
What Are the 5 Themes of Geography?
Simple Examples
Geography is a huge subject. Since teaching such an expansive topic can be overwhelming, the topic is organized under five separate themes. Discover what are the 5 themes of geography, and use them as a tool to help effectively structure and organize your approach to teaching geography.
Examples of Homographs: Same Spelling, Different Meaning
Homographs are pairs or groups of words that are spelled the same way. However, that's where the similarities end! Keep reading to learn more about homographs as well as several homograph examples that you encounter in your daily life.
Lines of longitude, also called meridians, are imaginary lines that divide the Earth. They run north to south from pole to pole, but they measure the distance east or west. Longitude is measured in degrees, minutes, and seconds. Although latitude lines are always equally spaced, longitude lines are furthest from each other at the equator and meet at the poles. A transcript is available that describes this infographic content in plain text. (Image credit: iStock)
Unlike the equator (which is halfway between the Earth's north and south poles), the prime meridian is an arbitrary line. In 1884, representatives at the International Meridian Conference in Washington, D.C., met to define the meridian that would represent 0 degrees longitude. For its location, the conference chose a line that ran through the telescope at the Royal Observatory in Greenwich, England. At the time, many nautical charts and time zones already used Greenwich as the starting point, so keeping this location made sense. But, if you go to Greenwich with your GPS receiver, you'll need to walk 102 meters (334 feet) east of the prime meridian markers before your GPS shows 0 degrees longitude. In the 19th century, scientists did not take into account local variations in gravity or the slightly squished shape of the Earth when they determined the location of the prime meridian. Satellite technology, however, allows scientists to more precisely plot meridians so that they are straight lines running north and south, unaffected by local gravity changes. In the 1980s, the International Reference Meridian (IRM) was established as the precise location of 0 degrees longitude. Unlike the prime meridian, the IRM is not a fixed location, but will continue to move as the Earth's surface shifts. Lines of longitude, also called meridians, are imaginary lines that divide the Earth. They run north to south from pole to pole, but they measure the distance east or west. The prime meridian, which runs through Greenwich, England, has a longitude of 0 degrees. It divides the Earth into the eastern and western hemispheres. The antimeridian is on the opposite side of the Earth, at 180 degrees longitude. Though the antimeridian is the basis for the international date line, actual date and time zone boundaries are dependent on local laws. The international date line zigzags around borders near the antimeridian. Like latitude, longitude is measured in degrees, minutes, and seconds. Although latitude lines are always equally spaced, longitude lines are furthest from each other at the equator and meet at the poles. At the equator, longitude lines are the same distance apart as latitude lines — one degree covers about 111 kilometers (69 miles). But, by 60 degrees north or south, that distance is down to 56 kilometers (35 miles). By 90 degrees north or south (at the poles), it reaches zero. Navigators and mariners have been able to measure latitude with basic tools for thousands of years. Longitude, however, required more advanced tools and calculations. Starting in the 16th century, European governments began offering huge rewards if anyone could solve "the longitude problem." Several methods were tried, but the best and simplest way to measure longitude from a ship was with an accurate clock. A navigator would compare the time at local noon (when the sun is at its highest point in the sky) to an onboard clock that was set to Greenwich Mean Time (the time at the prime meridian). Each hour of difference between local noon and the time in Greenwich equals 15 degrees of longitude. Why? Because the Earth rotates 360 degrees in 24 hours, or 15 degrees per hour. If the sun's position tells the navigator it's local noon, and the clock says back in Greenwich, England, it's 2 p.m., the two-hour difference means the ship's longitude is 30 degrees west. But aboard a swaying ship in varying temperatures and salty air, even the most accurate clocks of the age did a poor job of keeping time. It wasn't until marine chronometers were invented in the 18th century that longitude could be accurately measured at sea. Accurate clocks are still critical to determining longitude, but now they're found in GPS satellites and stations. Each GPS satellite is equipped with one or more atomic clocks that provide incredibly precise time measurements, accurate to within 40 nanoseconds (or 40 billionths of a second). The satellites broadcast radio signals with precise timestamps. The radio signals travel at a constant speed (the speed of light), so we can easily calculate the distance between a satellite and GPS receiver if we know precisely how long it took for the signal to travel between them. On the ground, NOAA's National Geodetic Survey manages the Continuously Operating Reference Stations Network, which comprises 1,800 stationary, permanently operating GPS stations. These CORS continuously receive GPS radio signals and incorporate that data into the National Spatial Reference System. The GPS position on a smartphone is accurate to within about 5 meters (16 feet), but processed CORS data can provide longitude accurate to within a few centimeters, along with latitude and height positions. The left image shows the Earth tilted on its axis. The equator and the Greenwich meridian line (prime meridian) are labeled. A section has been cut away to show longitude lines (or meridians) that run vertically around the Earth. These start at the Greenwich meridian line and are labeled from 0 to 90 degrees east. Additional lines are drawn from the center of the Earth to each labeled meridian. These illustrate that the longitude measurement for each point equals the angle made between a line from it to the center of the earth and one drawn through the plane of the prime meridian. Near the South Pole, an arrow indicates the direction of the Earth's rotation on its axis. The right image shows the Earth with the North Pole at the center of the image. At this angle, the Greenwich meridian line runs straight up and down, with 0 degrees longitude labeled at the bottom of the image. The antimeridian (180 degrees longitude) is found directly at the top of the image. The left half of the image is labeled Western Hemisphere and the right half labeled Eastern Hemisphere. Meridians are labeled around the Earth, from 0 to 180 degrees on the west side and from 180 back to 0 on the east.