

## Geography

### Notes

#### Geography Basics

- Referring to the Earth, horizontal lines drawn around the globe are known as lines of latitude (or parallels). Latitudes are referenced as either north (N) or south (S) of the equator.
  - The equator is listed as 0°.
  - The North Pole is at 90°N.
  - The South Pole is at 90°S.
- Vertical lines drawn around the globe are known as lines of longitude (or meridians) that start at the North Pole and end at the South Pole.
  - The 'Prime Meridian' is defined as 0° and extends north-south from western Europe through western Africa.
    - Areas west of the 'Prime Meridian' are defined as 'X'° West.
    - Areas east of the 'Prime Meridian' are defined as 'X'° East.
  - The 'International Date Line' is defined as 180° and extends north-south through the central Pacific Ocean.
- Long Island is located approximately at 41° N latitude, 73°W longitude or (41°N, 73°W).
- If a location is situated between a line of latitude and/or longitude, a quantity known as an 'arcminute' is needed. The equation that pertains to the arcminute is: One degree = 60'. This is similar to one hour equaling 60 minutes.
  - ½ degree = 30'
  - ¾ degree = 45'
- If we know the latitude of two separate places, we can calculate the distance between the two locations. The two equations that apply are:
  - One degree = 60 nm (nautical miles)
  - One degree = 69 mi (statute miles)
- The distance between 20°N and 30°N (or 20°S and 30°S for that matter) is 600 nautical miles (60 X 10) or 690 statute miles (69 X 10).
- If an object is moving from the equator to the North or South Pole, the object is said to be moving 'poleward'.
- Conversely, if an object is moving from the North or South Pole toward the equator, it is said to be moving 'equatorward'.
- The 'Northern Hemisphere' is defined as any area north of the equator.
- The 'Southern Hemisphere' is defined as any area south of the equator.
- The 'Western Hemisphere' is defined as being located east of the International Date Line and west of the Prime Meridian.
- The 'Eastern Hemisphere' is defined as being located west of the International Date Line and east of the Prime Meridian.

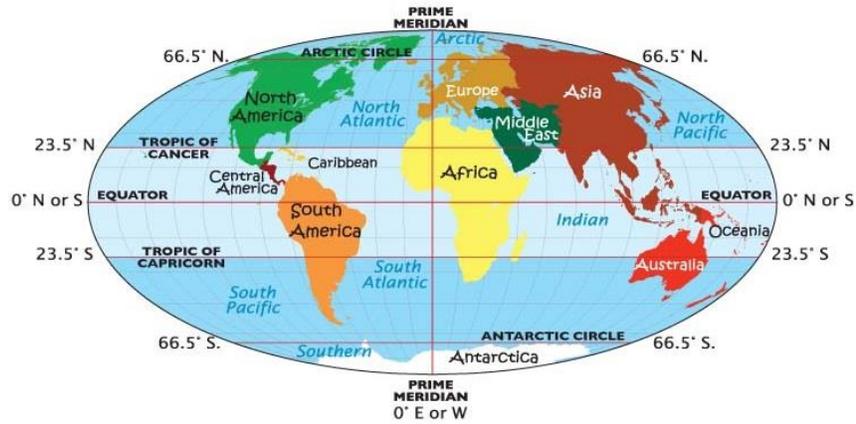
- A westerly wind is defined as moving from west to east.
- A southerly wind is defined as moving from south to north.
- A northerly wind is defined as moving from north to south.
- An easterly wind is defined as moving from east to west.
- Latitudes near the polar regions are known as the 'high latitudes'.
- Latitudes near the equatorial regions are known as the 'low latitudes'.
- Any areas outside the tropics are called the 'extratropics'.
- The distance between each line of latitude is constant.
  - Note that the distance between each line of longitude is not constant.
- The Earth rotates 15° of longitude each hour.



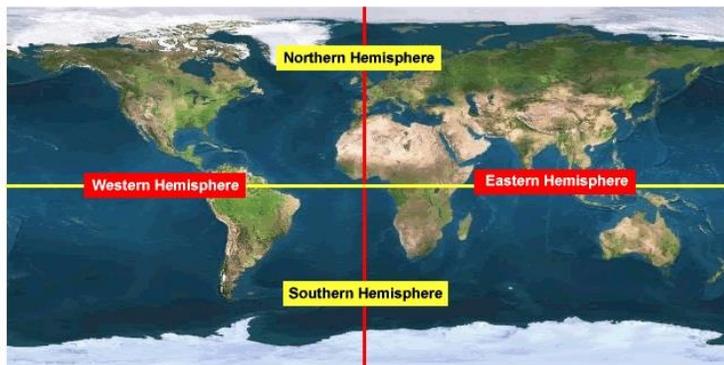
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