

to meet, and where the sun appears at rising and setting, is called the sensible horizon. The rational or true horizon is an imaginary great circle passing round the earth, and dividing it into two hemispheres; the one superior and visible, which has for its pole the zenith, the other inferior and invisible which has for its pole the nadir. The circumference of this circle is divided into four quarters of 90° , which commence at the East and West points and terminate at the meridian. The second graduation contains the signs of the zodiac, with the corresponding months.

4. What are the meridians?

The meridians are those circles that pass from pole to pole, dividing the earth into eastern and western hemispheres. They are so called because when the sun comes directly opposite this circle, it is then meridiæ or mid-day to all places lying under it; the sun has then its greatest altitude for that day, which is therefore called its meridian altitude. There are commonly marked on the globe twenty four meridians, one through every fifteen degrees, corresponding to the twenty four hours of days and night. Every place has its own meridian, and a change of position towards the east or the west changes our meridian; but we may journey from pole to pole without changing it.

5. What is the equator?

The equator is a great circle equally distant from the poles, dividing the globe into two equal parts called the northern and southern hemisphere.

From the equator, latitude is reckoned to 90° . Longitude is also marked on this circle from the first meridian to 180° east and west.

6. What is the ecliptic?

This great circle indicates the apparent annual revolution of the sun. It cuts the equator at two places