

4. The shadow of the earth, during an eclipse of the moon, is always circular.

**MERIDIANS and PARALLELS.**— In order to determine accurately the position of places on the earth's surface, imaginary circles are drawn round it, some of which run north and south, others east and west. Every circle is divided into 360 equal parts, called degrees. The circles which divide the earth into two equal parts are called great circles, those which divide it into two unequal parts are called small circles. Those circles which run north and south are called Meridians, and are all great circles. They mark the Longitude of places, or the distance east or west of one place from another. Longitude is reckoned from the first Meridian, which runs through Greenwich near London. Those places on the east of the first Meridian have east longitude, those on the west have west longitude. A great circle, called the EQUATOR, equidistant from the poles, passes round the earth, east and west, and divides it into the NORTHERN and SOUTHERN HEMISPHERES. Small circles, called parallels of latitude, are drawn between the equator and the poles, and mark the distance north or south from the equator.

The most important of the parallels are the Tropics and the Polar Circles. The Tropic of Cancer is 23 1-2 degrees north of the equator, the Tropic of Capricorn, 23 1-2 south; the Arctic Circle is 23 1-2 degrees from the north pole, the Antarctic 23 1-2 from the south pole.

**ZONES.**— The Tropics and the Polar Circles divide the earth into five Zones, differing in climate