

Name _____ Date _____ Period _____ Page _____

Time Zones and Ellipse Pathway

Objective: _____

Research:

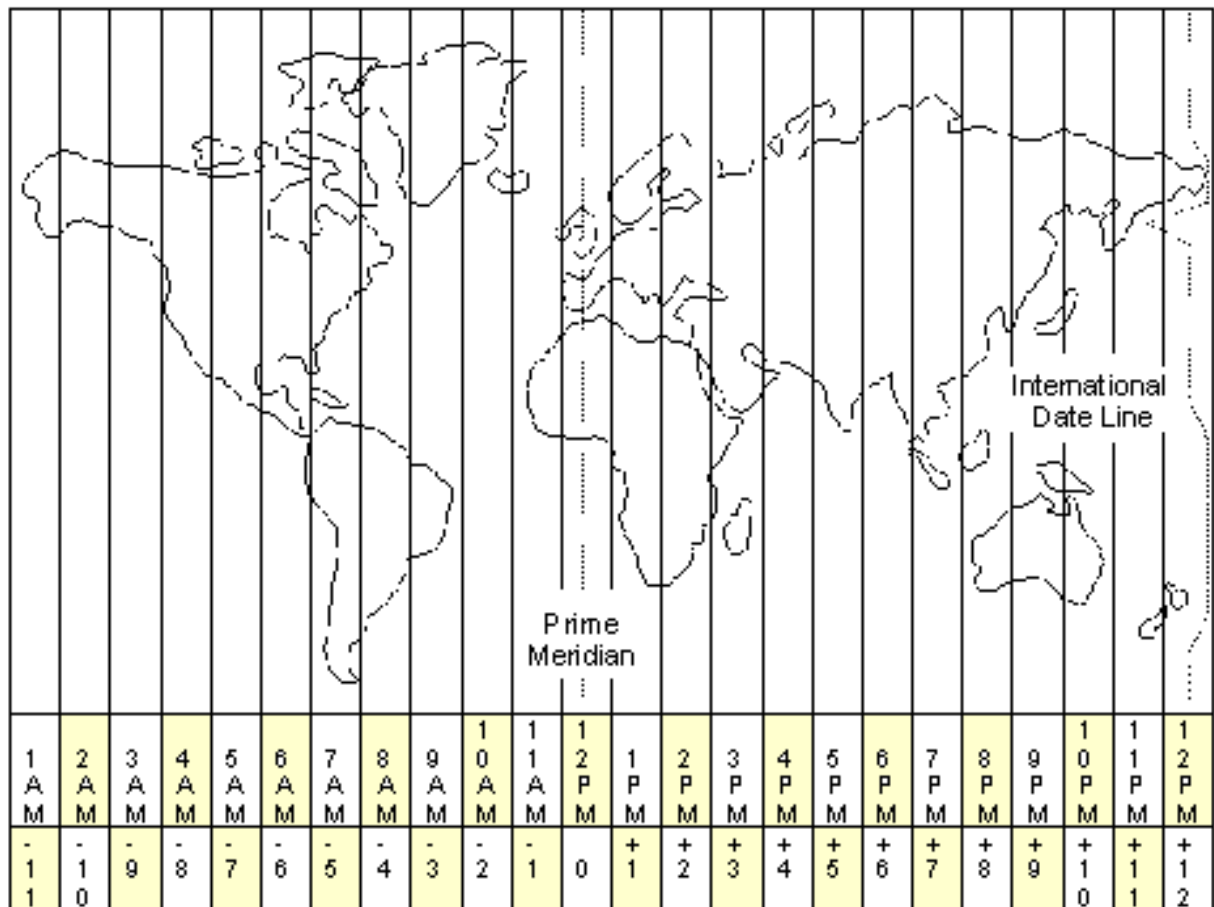
Rotation of the Earth: _____

Time Zones of the Earth: _____

Prime Meridian: _____

12 time Zones to the West of the Prime Meridian: _____

12 time Zones to the East of the Prime Meridian: _____



GMT, Greenwich Mean Time, London

International Dateline: _____

Daylight Saving Time: _____

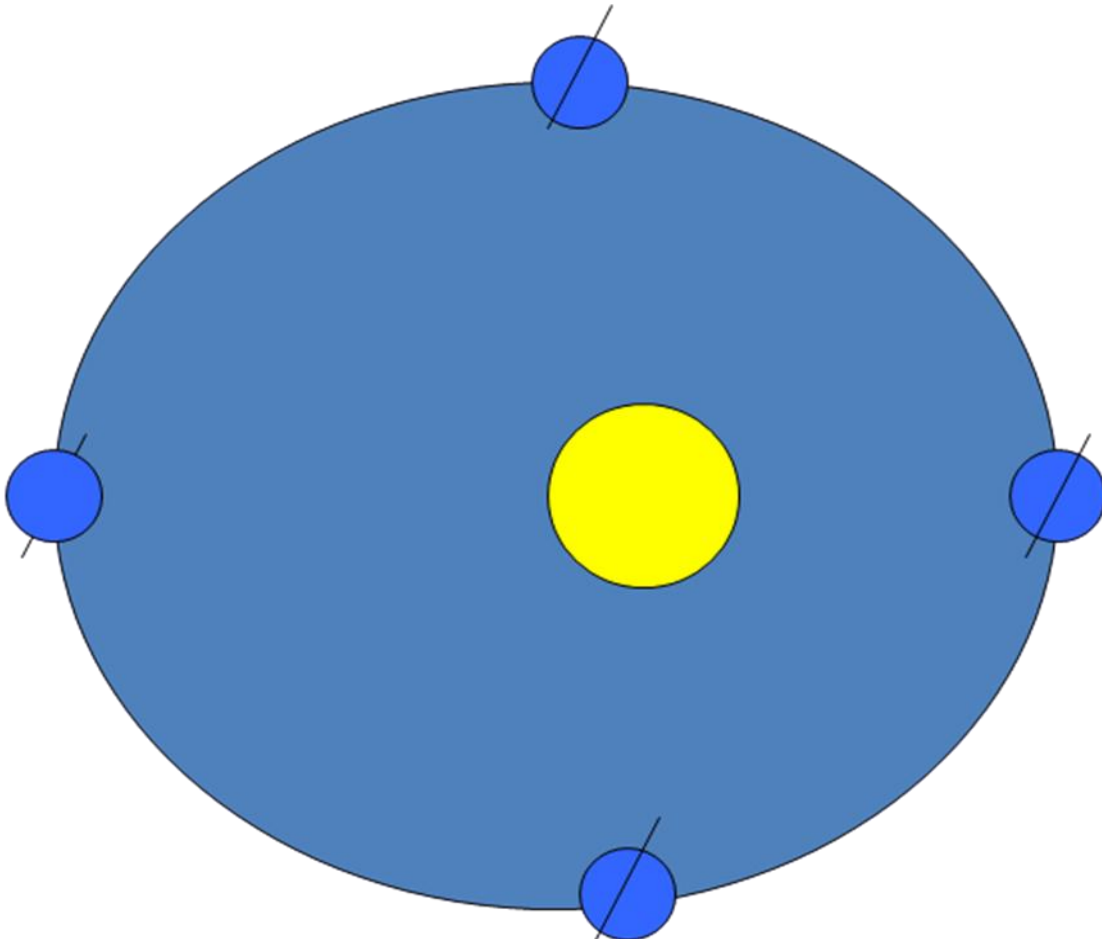
Leap Year: _____

Earth revolves around the Sun in an orbit shaped like an ellipse _____.

Brightness of Mars as seen from the Earth: _____

Earth is closest to the Sun during _____ in the northern hemisphere and furthest from the Sun during _____ in the northern hemisphere.

Label the different what is happening at the different positions on the elliptical pathway



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Conclusions:

1. How do you explain that when the Earth is closest to the Sun, it is winter in the Northern Hemisphere? _____

2. The planets (including Earth) do not move at constant speeds while moving in the elliptical orbits. A planet increases in speed as it gets closer to the Sun. What force causes this change in speed? -

3. Which part of the Earth's revolution takes longest, from vernal equinox to autumnal equinox or from autumnal to vernal? _____

4. If you placed a phone call to Tokyo, Japan from Greenwich, England on Friday at 4:00 pm, what day is it in Japan? _____

About what time do you think that it is? _____