**Time Zone Notes**

Prime Meridian

The Prime Meridian is the line of \_\_\_\_\_degrees of \_\_\_\_\_\_\_\_\_\_\_\_\_that divides the Earth into Eastern and Western­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The Prime Meridian runs from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_through the old observatory in Greenwich, London, UK. It has been used as the world standard for longitude and for telling time since \_\_\_\_\_\_\_\_\_\_\_\_\_by an international agreement.

Universal Time (UT)

Universal Time is the time on the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: the number of hours, minutes, and seconds that have passed since \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(when the Sun is at a longitude of 180°) in the Greenwich Time Zone. Universal Time is generally stated using 24-hour notation (Hours: Minutes: Seconds, e.g., 16:35:04).

Time Zones

The world is divided into \_\_\_\_\_ time zones. Time zones are generally centred on \_\_\_\_\_\_\_\_\_\_\_\_\_\_(circles through the poles) of a longitude that is a multiple of 15 degrees; however, the shapes of time zones can be quite irregular because of adjustments around the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of countries. All time zones are calculated based on their distance from Prime Meridian.

Local Time

Local time is the time in any given time zone in the world, determined in relation to the time at the Prime Meridian (0° of longitude) in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, England. Note that each time zone in Canada has a name. In Winnipeg, we are in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Daylight Savings

Most time zones in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are adjusted in winter for Daylight Savings.

International Date Line

The International Date Line is an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_line on the Earth's surface, at approximately \_\_\_\_\_\_\_\_\_\_\_of longitude starting from the Prime Meridian in either direction (east or west). Its path is adjusted so that it does not pass directly through any populated areas of the world, since it separates the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Travelling east across the line takes the traveller back one day; travelling west takes the traveller forward one day.

**Time Zone Questions**

1. Why do we need time zones?
2. Are time zones related to latitude and longitude? Explain.
3. How many degrees complete a rotation of the Earth?
4. How many time zones are there in the world?
5. How many time zones are there in Canada?
6. What time difference generally exists between two adjacent time zones?
7. Is it earlier or later as you travel west? East?
8. Where is the dividing line between east and west longitude?
9. Is it the same date everywhere in the world? Explain.