HOMEWORK AND ASSESSMENT

TOPIC 1

MAPWORK
Use this Time zone map to help you answer the questions below.

You can check the time difference from the PRIME MERIDIAN / UTC using the colours of each country.

Coordinated Universal Time (UTC) is often interchanged with time zones like Greenwich Mean Time (GMT). But GMT is basically the label used in the UK just as other countries use other labels. E.g. WET is the name of the time-zone in Portugal, which is the same as UTC +00:00.
1. Amy Purdy is a snowboarder who has had both her legs amputated. She will race in Sochi at 08:35 and the race lasts 2 hours and 45 minutes. What time will her family in Las Vegas, USA start and end watching her race?

2. Michael Bruegger is a standing skier who was born with one leg incorrectly formed. He will race at 9:05 in Sochi. His family in Switzerland starts to watch TV 20 minutes before the race begins and watch for 85 minutes. What time will they start and end watching his race?

3. The wheelchair curling begins at 12:05 in Sochi, Russia. There are 10 ends (sessions) that last 7 minutes each, with a 2 minute break in between each one. What time will the game finish? If I am watching in Sydney, Australia, what time will I begin watching? What time will the game end?

4. Brian McKeever, from Calgary in Canada is a 90% blind cross country skier and Biathlete. He starts his race at 09:35 in Sochi, Russia. He takes 23 minutes and 57 seconds to complete his race. What time does he finish his race?

   __ __ : __ __ : __ __

   hours minutes seconds

   After he has finished his race, how long is it until 10:00?
Time Zone Maps

The Earth is divided into 24 time zones. Each time zone is about 15 degrees wide. All the people in the same time zone set their clocks to the same time. Imagine that the time zones are numbered 1 to 24. The number 1 zone is at the International Date Line, or 180° longitude. As the number of the time zone increases by 1, the time becomes an hour later. The different time zones allow people around the world to experience a common event at about the same clock time. For example, most everyone in the world has sunrise at about 6:00 in the morning.

The United States has six time zones. As you move east from one time zone to another, the time gets an hour later.

Directions

1. Through which oceans does the International Date Line pass?

2. When it is 4:00 A.M. in Portland, what time is it in Sydney?

3. When it is 9:00 P.M. in Tokyo, what time is it in Rio de Janeiro?

4. What does this difference in time suggest about the location of the two cities?

Activity

Write a story about going backward or forward in time. To what time period would you go? Include a drawing of your time machine.
World Time Zones

1) Where is all time measured from? ________________________________

2) How many world time zones are there? Why? _______________________

3) Approximately how wide is each time zone? _________________________

4) Explain why time zone boundaries are not completely straight.
   __________________________________________________________________
   __________________________________________________________________

5) If the time in London is 12:00 P.M. GMT, what time is it in:
   
   Mexico City: _______________ Paris: _________________
   Moscow: _________________ Tokyo: _________________

6) If it is Tuesday morning west of the International Date Line (eastern hemisphere),
   then what day is it east of the International Date Line (western hemisphere)?
   __________________________________________________________________

7) If it is January 7, 10:00 P.M. in New York City, what date and time is it in London?
   __________________________________________________________________

8) If it is October 29, 3:00 A.M. in Sydney, what date and time is it in New York City?
   __________________________________________________________________

9) A man living in Honolulu, Hawaii on Tuesday 12:00 P.M. calls his cousin in Tokyo,
   Japan. What time is it in Tokyo? What calendar day is it?
   __________________________________________________________________