**Time Zones**

-needed because \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ happen at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ times in

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ places

-created by Sir \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in 1879

-change as your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes (as you go \_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_)

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ time zones usually differ by \_\_\_\_\_\_\_\_\_\_

-\_\_\_\_\_ hours = \_\_\_\_\_ time zones

-\_\_\_\_\_ degrees/24 zones = \_\_\_\_\_ degrees per zone

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the time where you are

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **(GMT)** is the time in Greenwich England

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(**UT**) is Universal Time, which is how many hours you are \_\_\_\_\_\_\_\_  or \_\_\_\_\_\_\_\_ GMT

-see how many time zones you have to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in order to get from one to the other for the time difference

 -Time zones move \_\_\_\_\_\_\_\_ as you go East (where the \_\_\_\_\_\_\_\_ rises first)

-Canada has 6: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ separates one day from the next (one day ahead on the left side)

Examples

What times zones are the following in?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT)

What is the time difference between:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT) and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT): \_\_\_ hours

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT) and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT): \_\_\_ hours

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT) and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT): \_\_\_ hours

Find the local time in the new city

( \_\_\_ UT) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ------🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT)

( \_\_\_ UT) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ------🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT)

( \_\_\_ UT) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ------🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_ UT)

**Questions**

For all time zone conversions, make sure to **explain your thinking** for full marks.

1. Where is all time measured from? Why was this location chosen?
2. How many time zones are there? Why is this?
3. Which country has the most time zones? How many does it have?
4. If the time in LONDON, ENGLAND is 2P.M. , what time is it in

|  |  |  |
| --- | --- | --- |
| City | Time difference from London | Local Time in City |
| Moscow |  |  |
| Paris |  |  |
| Tokyo |  |  |
| Brisbane |  |  |
| New York |  |  |
| Delhi |  |  |

5. If the time in SAN FRANSISCO, USA is 7.30am what time is it in

|  |  |  |
| --- | --- | --- |
| City | Time difference from San Francisco | Local Time in City |
| Berlin |  |  |
| Cairo |  |  |
| Toronto |  |  |
| Johannesburg |  |  |
| Beijing |  |  |
| Tehran |  |  |

6. How many one hour zones **should** China lie in? \_\_\_\_\_\_\_\_\_\_

7. 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)?

8. If it is January 24th, 10:30pm (22:30) in New York, what time and date is it in Moscow?

1. If it is November 5th, 3:00am in Brisbane, what time and date is it in San Francisco?

10. Explain why the time zone boundaries are not straight.

11. 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?

1. If it is October 29, 3:00 A.M. in Sydney, what date and time is it in Chicago?
2. If it is January 7, 10:00 P.M. in Chicago, what date and time is it in London?
3. Billy boards a plane at an airport in Montreal for a flight to Berlin. He departs Montreal at 3:55pm. The flight lasts seven hours and twenty minutes.

a)      When does he land, Berlin time?

b)      When does he land, Montreal time?

1. A ship leaves Tel-Aviv, Israel at 11:18am, Tuesday for a six day, two-hour, and twelve-minute trip to Rio de Janeiro, Brazil.
2. When does it dock, Rio time?

b)      When does it dock, Israel time?

1. Millie leaves Perth, Australia on a six-hour, fifteen-minute flight to Hong Kong. The plane leaves at 1:08am, local time. What is the local time on arrival?

1. You leave Yokohama, Japan at 12:30am, Sunday for a twelve-hour flight to Vancouver. When do you arrive (day and time) Vancouver time?