



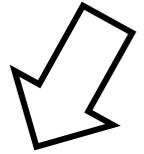
Year 5 Afternoon Learning -

Week beginning Monday 18th January 2021

This is your themed learning for Geography:

World Time Zones

Read the information.



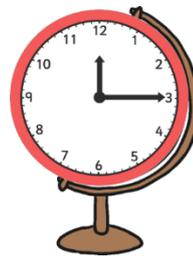
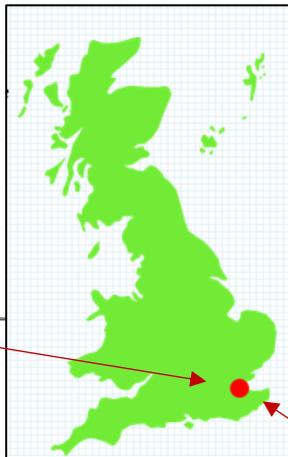
What do you remember about day and night?

The Earth rotates one complete turn every 24 hours to give us day and night. When Britain faces the Sun it is daytime in Britain, but the other side of the world is in darkness.

So, in Australia it is the middle of the night.

If you have access to a device: <https://www.bbc.co.uk/bitesize/clips/zrd9wmn>

All time zones are measured from a starting point at England's Greenwich Observatory. This point is known as the Greenwich Meridian or the Prime Meridian. Time at the Greenwich Meridian is known as Greenwich Mean Time (GMT) or Universal Time.



How do time zones work?

Midday (12 noon) is the time when the sun is highest in the sky. The sun is highest in the sky at different times in different places in the world. So for every place in the world to have midday when the sun is highest, we have to divide the world into time zones.

The Earth is a sphere divided into 360 degrees. The Earth turns 360 degrees in 24 hours. 360 divided by 24 is 15 degrees so the Earth turns 15 degrees each hour.

The Earth has 24 different time zones and local time depends on which time zone you are in.

Challenge Questions:

When do we change our clocks in the UK?

(Is there a way to remember?)

Why do we do it?

Do you agree with it?

The Eastern time zone in the United States is known as GMT minus five hours (see map on the next page). This means that when it is noon in the Eastern USA, it is 5pm in Greenwich.

The International Date Line (IDL), another 'invisible' line, is located on the opposite side of the planet from the Greenwich Observatory.

The Prime Meridian or Greenwich Meridian line is a line of longitude at 0 degrees.

It passes right through Greenwich in London.

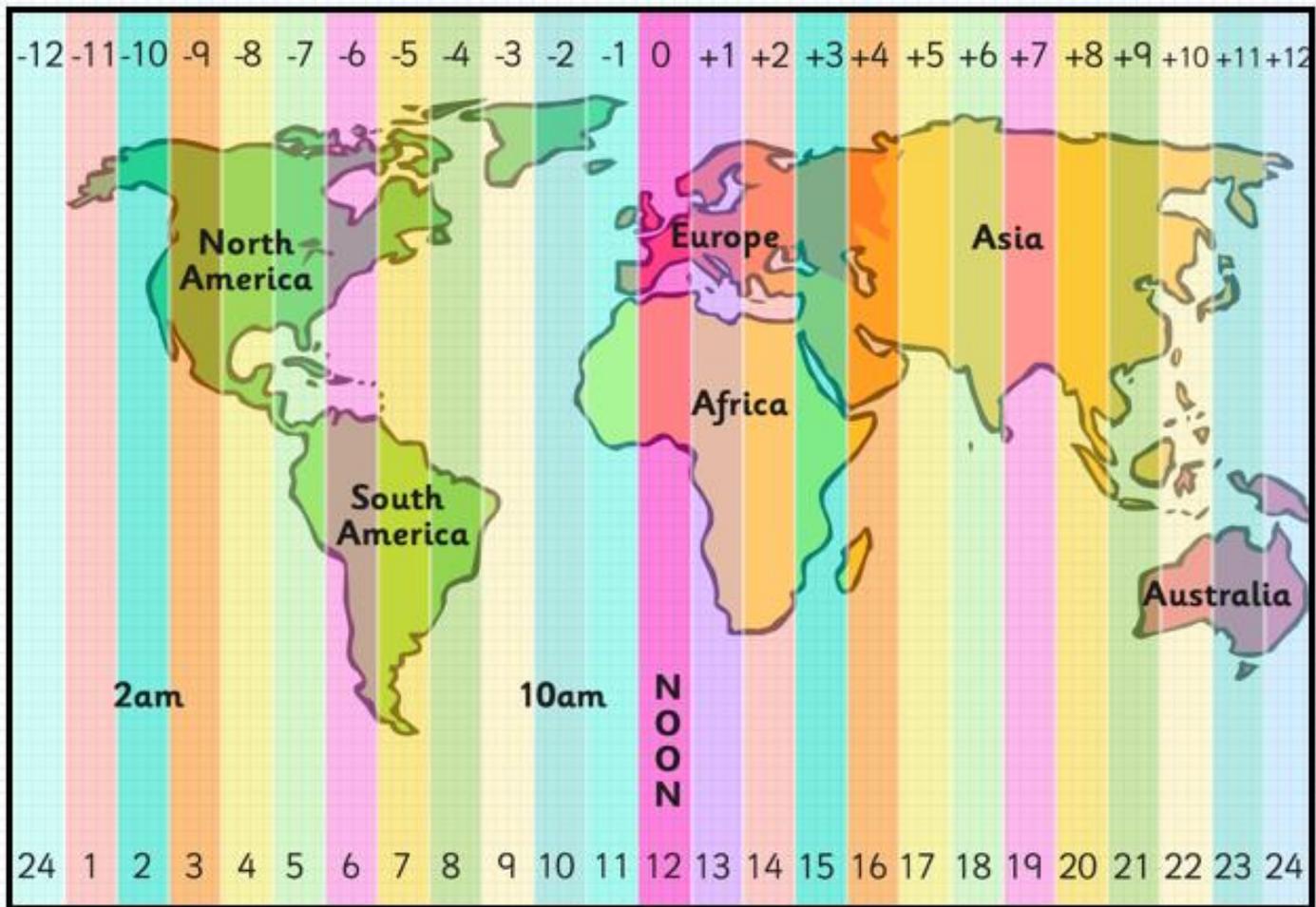
Which are lines of longitude and which are latitude?

- Prime Meridian
- Equator
- Tropic of Cancer
- Greenwich Meridian
- Tropic of Capricorn



Use the map to help answer the questions below:

- 1) Why are some countries in more than one time zone?
- 2) It is 2pm in London, and I'm having a nice cup of tea. What might someone be doing at the same moment in: Mexico? Australia? Turkey? India?
- 3) I catch a plane that leaves Heathrow at 11am. Six hours later I arrive in Florida (blue arrow). What is the time now?
- 4) Your friend in Tokyo (blue arrow) asks you to call her at 9am her time. What's the time in England when you call?



Work out what time it would be in the following places if it is 12 noon in Greenwich, London.

Place	Time (if 12 noon in Greenwich)
Iceland (+ 0 hours)	
Chile (- 3 hours)	
Seattle, USA (- 8 hours)	
Ecuador (- 5 hours)	
Florida, USA (- 5 hours)	
Italy (+ 1 hours)	
Madagascar (+ 3 hours)	