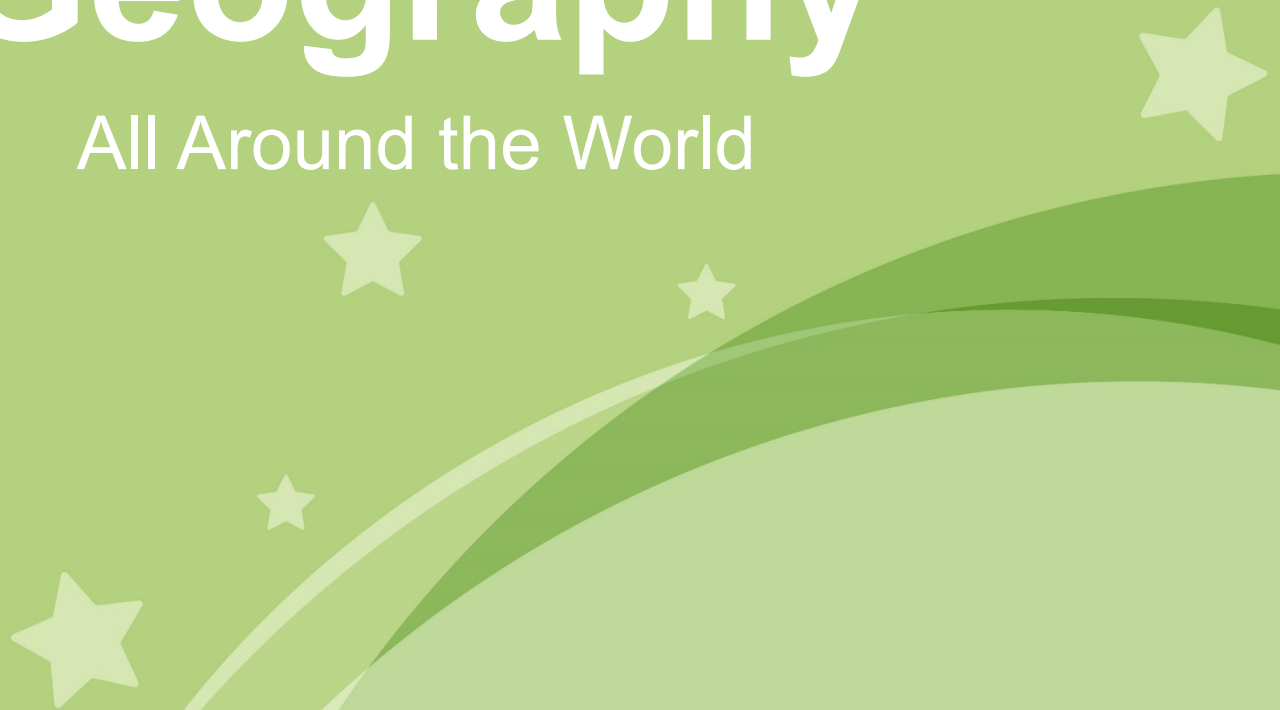




Geography

All Around the World





All the Time in the World

Aim

- To explain the position and significance of time zones.

Success Criteria

- I can tell you why day and night occur.
- I can tell you why we need to have time zones.
- I can find the local time in another city using time differences.

Day and Night



Can you explain why we have day and night time?

The Earth spins on its axis (an imaginary line) and over the course of 24 hours, different parts of the planet are facing towards the Sun and different parts are facing away from it.

When we are facing away from it, it is night time.



When we are facing towards the Sun, it is day time.

What Time Is It Now?

Time is different depending on where you are in the world. If it is daytime in the UK, it will be night-time in Australia.

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. $360 \div 24 = 15$ degrees, so the Earth turns 15 degrees each hour.

The Earth has 24 different time zones- one for each hour in the day.

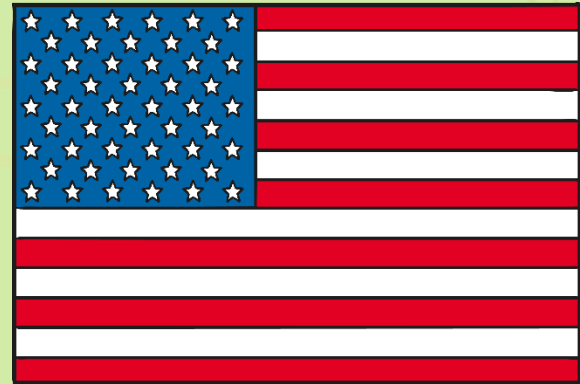


The Time Zones

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.



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



The Time Zones

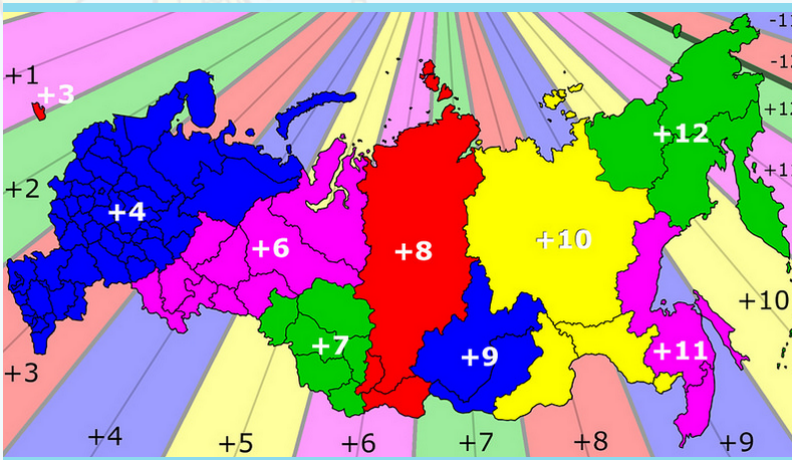
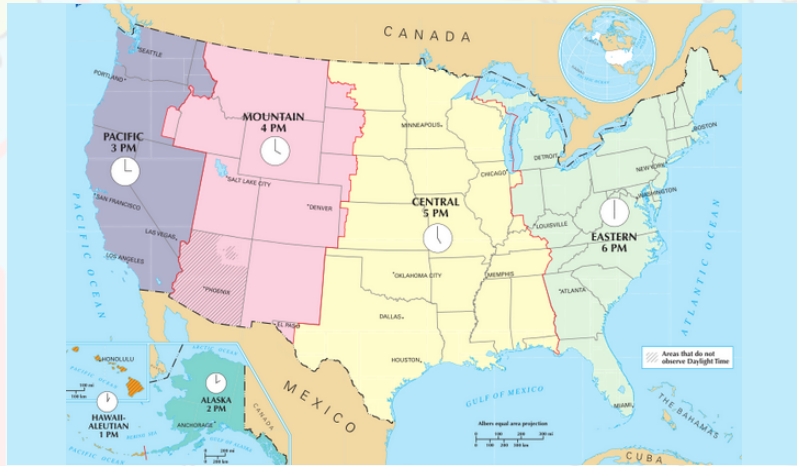
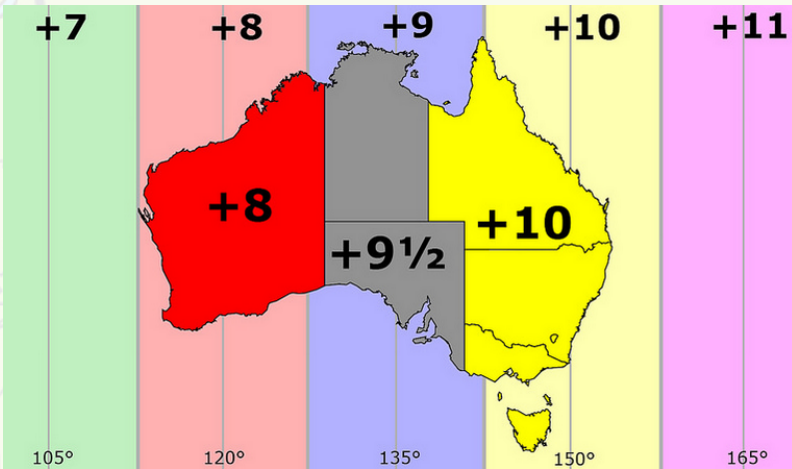


















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What's the Time in...?

What's the Time in...?

	London 06:00	Rio de Janeiro _____	
	London 10:15	New York _____	
	London 12:30	Peking _____	
	London 07:50	Washington _____	
	London 21:30	Edinburgh _____	
	London 14:22	Milan _____	
	London 14:00	Helsinki 14:00	
	London 18:30	Sydney 18:30	

twinkl planit Geography Year 4 All around the world! What Time is the clock? (Lesson 5)

Challenge! Can you find out...

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?

How does the time change in the UK?

Does this change impact the UK world time zone?

On what date will we next change our clocks in the UK?

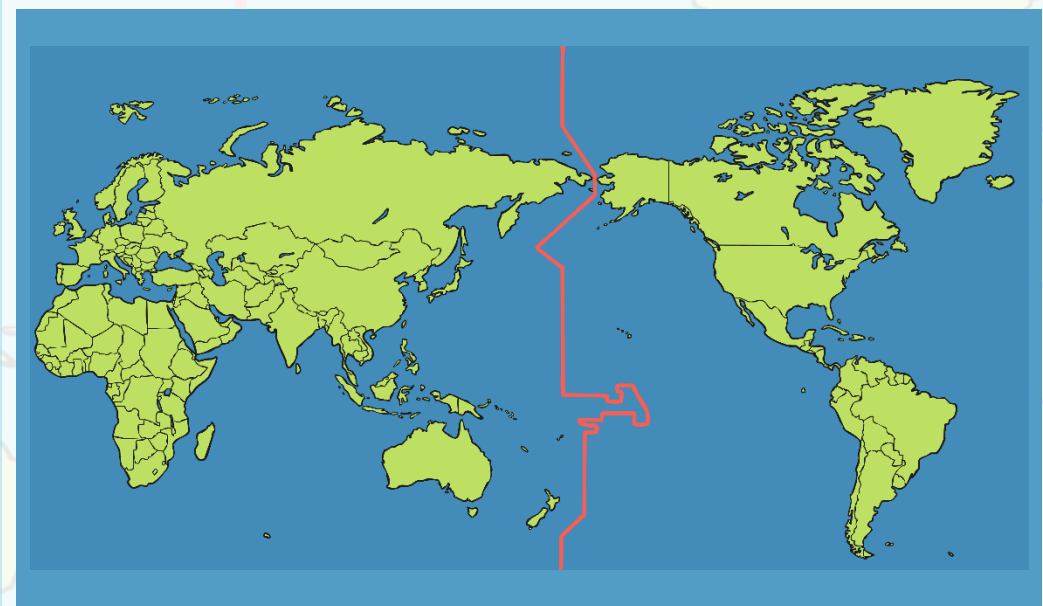
Do other countries do the same?

What's the Time in...?

The International Date Line is 180° -on the opposite side of the world-from the Prime Meridian. When it is noon along the Prime Meridian, it is midnight along the International Date Line.

It is possible to travel back in time, but only to 23 hours ago....

If you flew from Apia, Samoa (on the Western side of the International Date Line) to Pago Pago, American Samoa (on the Eastern side) it would take less than an hour. But because you have crossed the IDL, you would arrive 23 hours before you left!



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