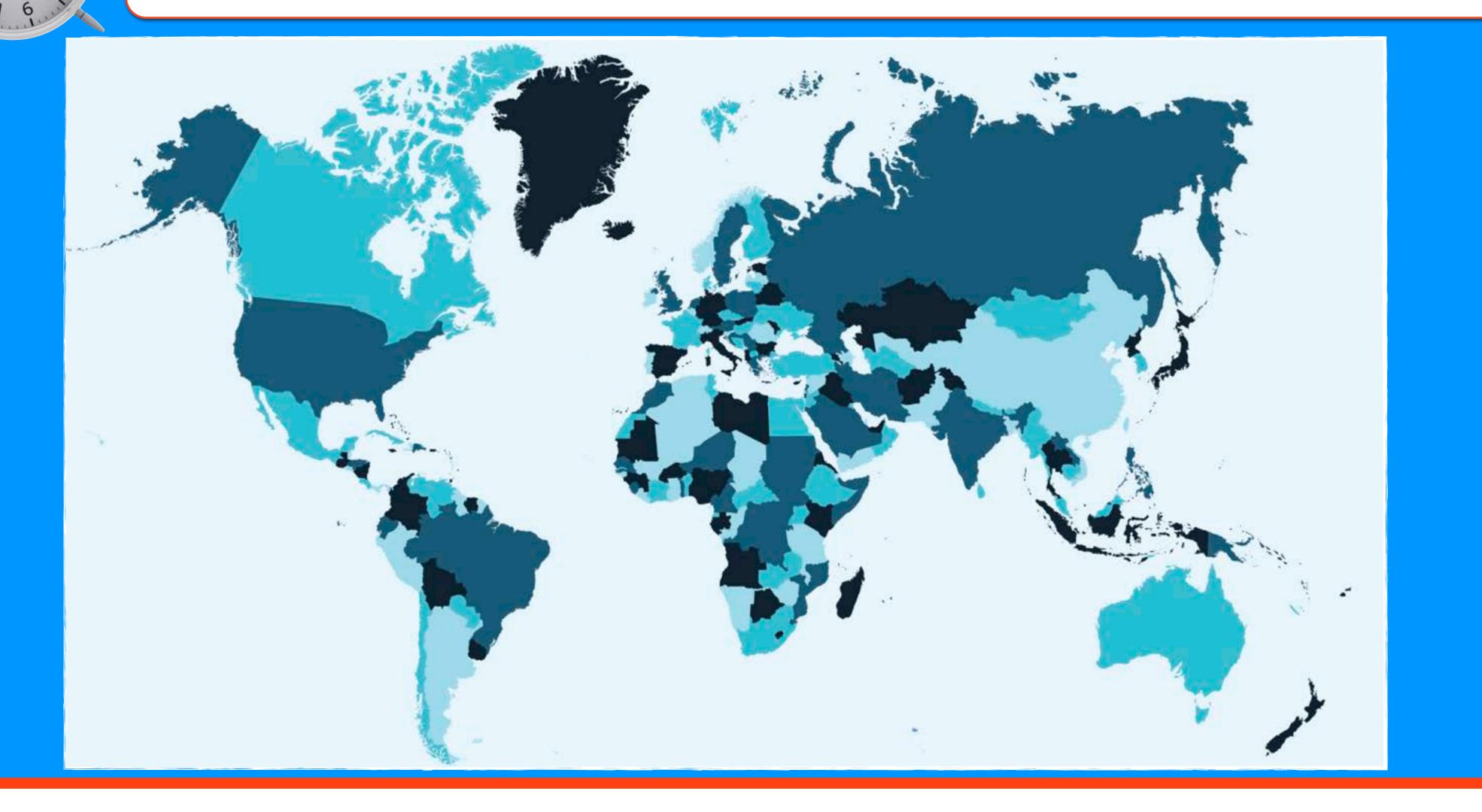
North America

Learning Objective: To explore the various time zones of North America and how these compare to other time zones around the world.



What time is it right now where we are? What time is it in Mexico? Is it the same?





Different parts of the world have different time zones. This means that when it is midday for us, somewhere in the world it will be midnight, somewhere else in the world it will be 7 am and somewhere else it will be 5pm.

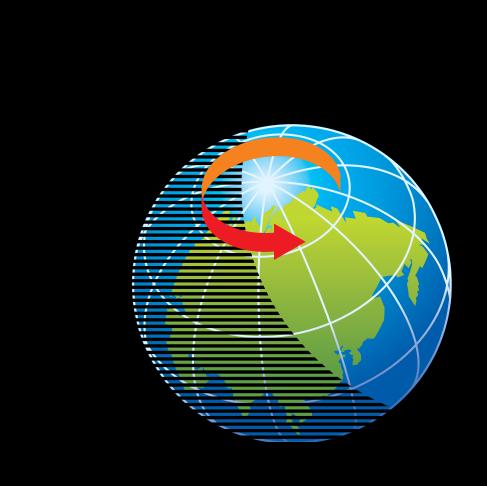


Why do we have different time zones? Why do you think it is necessary?

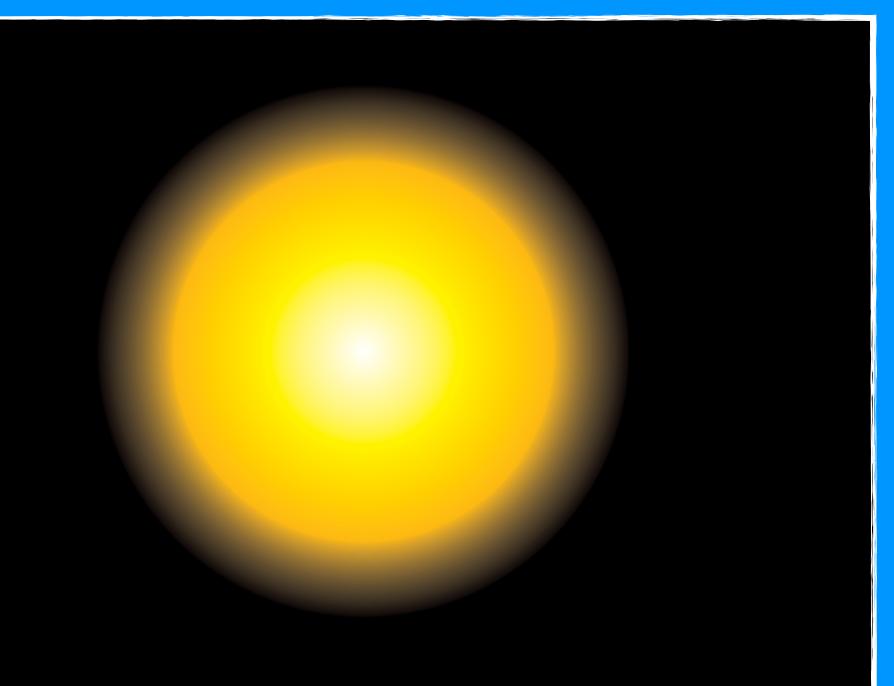




Because the Earth rotates on its axis once every 24 hours, dawn and dusk happen at different times in different places in the world. When it is day in one half of the world, it is night in the other half.



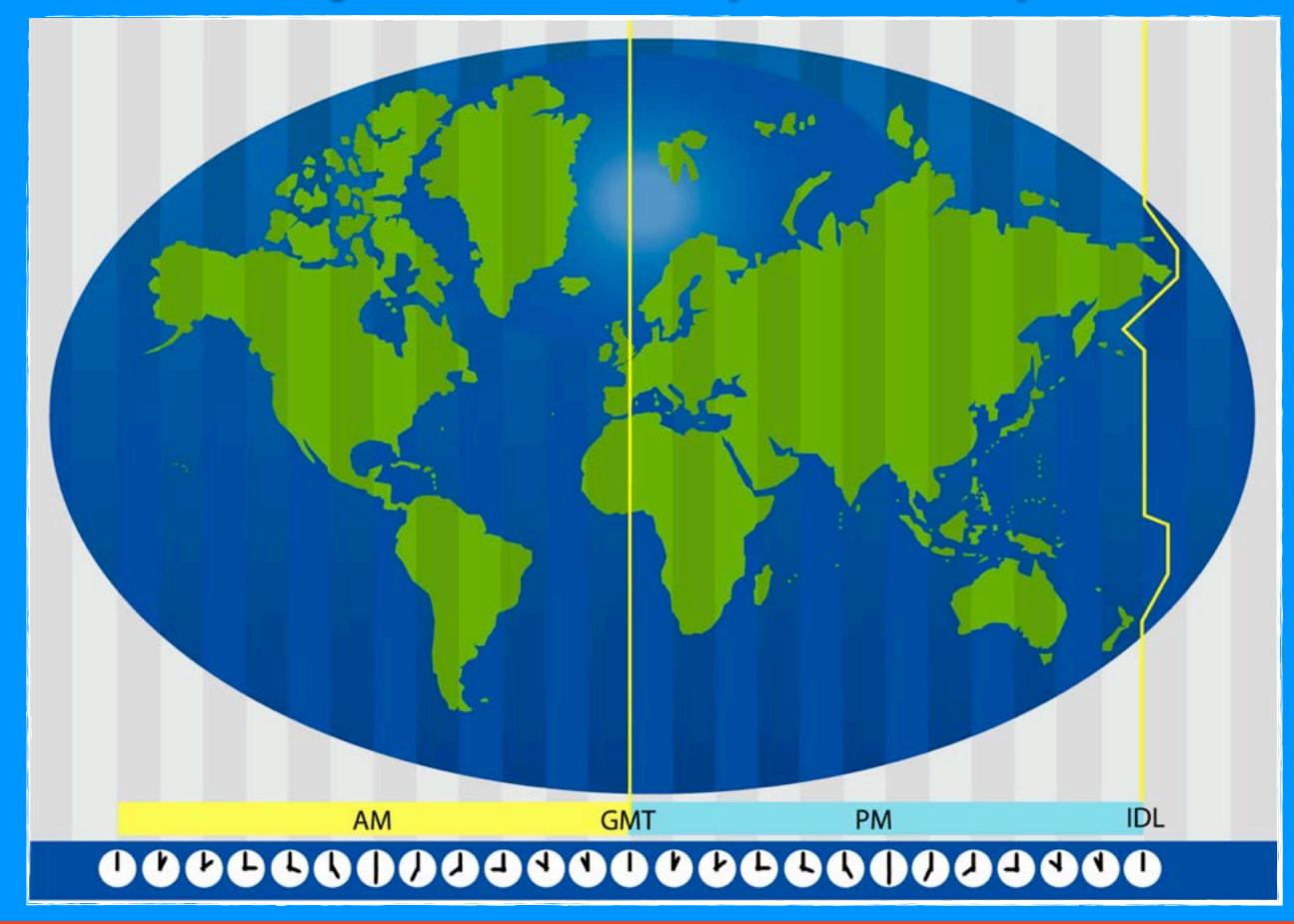




If everyone followed the same time, some people would be eating breakfast at 7 am when the sun was setting and others would be going to bed at 10pm when the sun was rising!



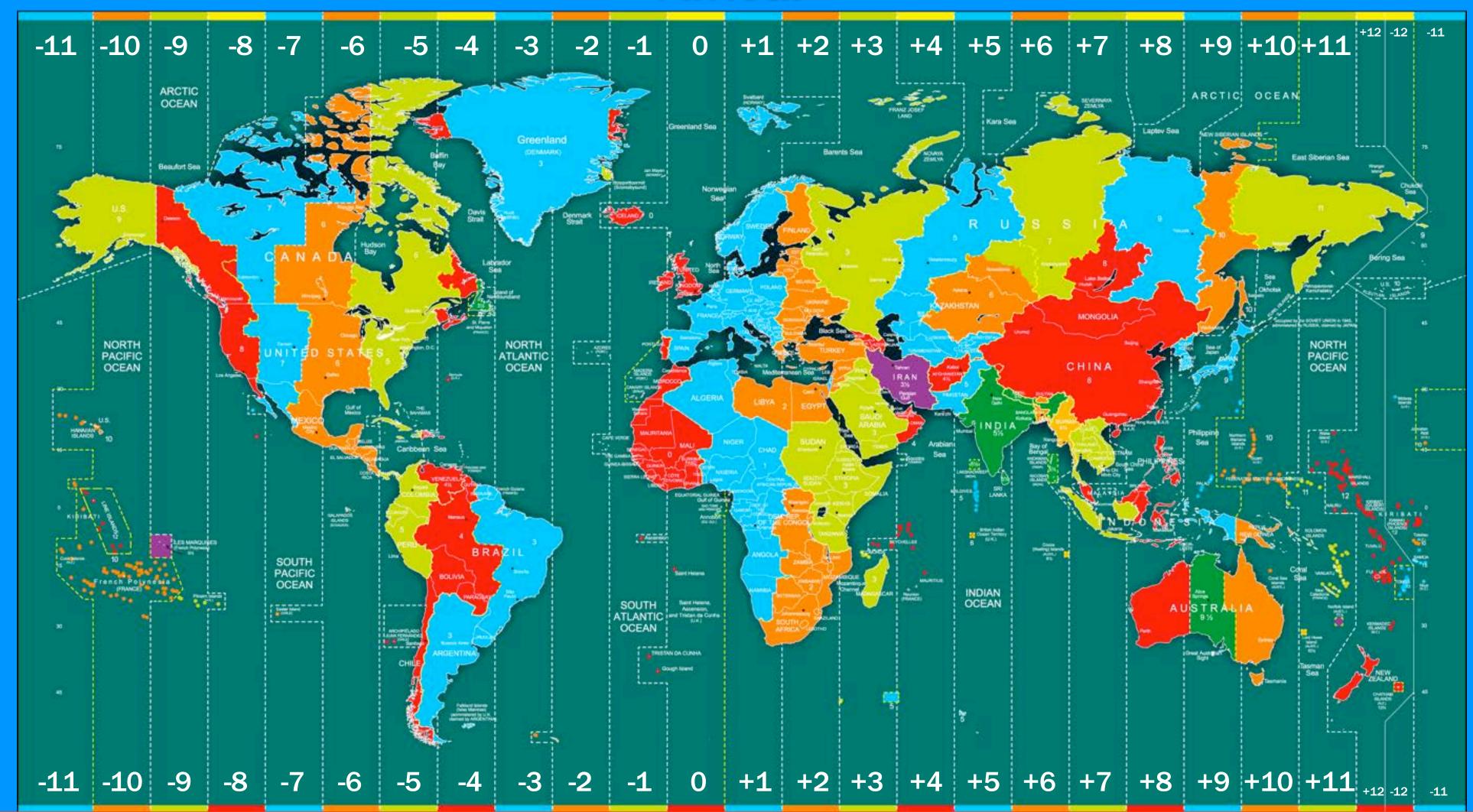
There is an imaginary line that runs down from the North Pole to the South Pole through the Royal Observatory in Greenwich, London which is known as the Greenwich Meridian. This line separates the east from the west in the same way that the equator separates the north from the south.





The Greenwich Meridian is linked to Greenwich Mean Time (GMT). All the time zones in the world are calculated in relation to GMT and are either up to 12 hours ahead or 12 hours behind GMT.

This map shows the time zones of the world. All the countries in red in the 'O' section follow Greenwich Mean Time (GMT). This includes the UK, Portugal and parts of west Africa.









As you travel east, you add an hour for each time zone. In the GMT+1 time zone, for example, if it is 10am in the UK, it is 11am in the GMT+1 time zone, such as Sweden.







As you travel west, you take away an hour for each time zone. In the GMT-1 time zone, for example, if it is 10am in London, it is 9am in the GMT-1 time zone.







All the countries in North America have time zones which are behind GMT. Washington, D.C. for example is 5 hours behind (GMT-5). This means if it is 6pm in the UK, it is 1pm in Washington, D.C.







Edmonton in Canada is GMT-7. This means when it is 11pm in Edmonton, it is 6am in London.

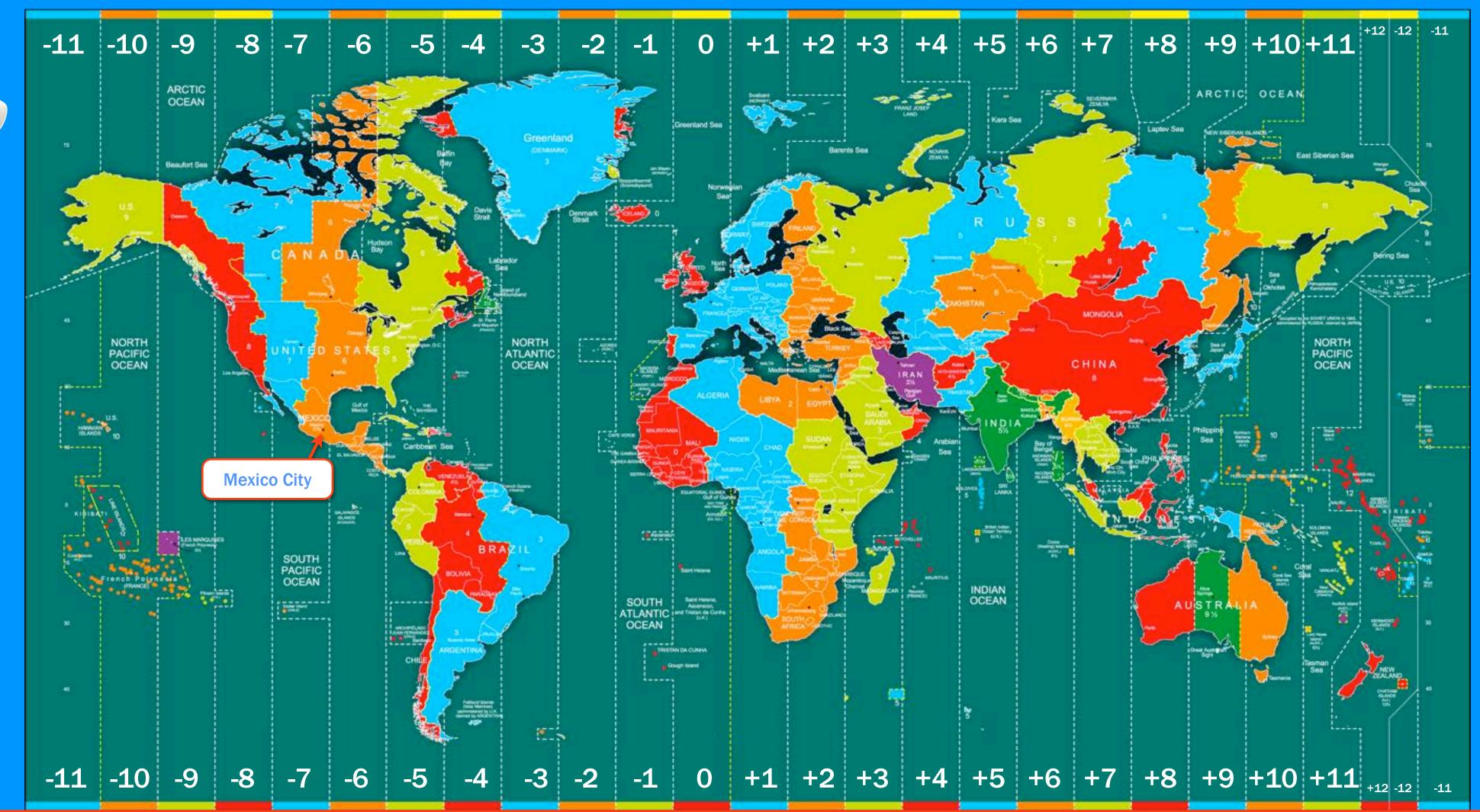








Can you work out what the time would be in Mexico City if it was 3pm in the UK?







Mexico City is GMT-6 so if it is 3pm in the UK it will be 9am in Mexico City. This means children in Mexico are starting school at the same time children in the UK are finishing!

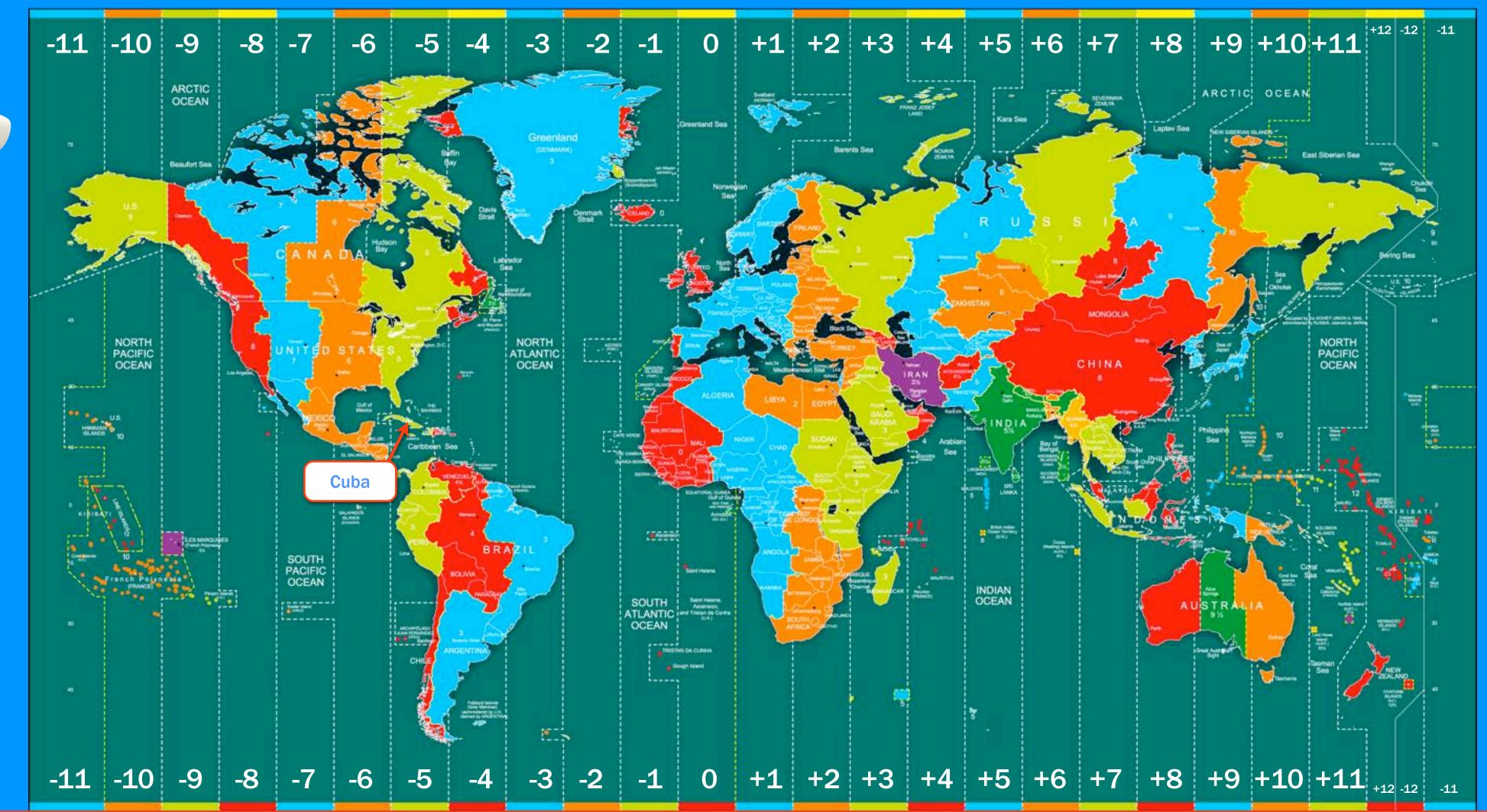








Can you work out what the time would be in Cuba if it was 10.30pm in the UK?







Cuba is GMT-5 so if it is 10.30pm in the UK it will be 5.30pm in Cuba. People in the UK will be getting ready for bed as people in Cuba are getting ready for dinner!













California is 8 hours behind GMT and Finland is 2 hours ahead. This is a difference of 10 hours so if it is 1am in California, it would be 9am in the UK and so 11am in Finland.

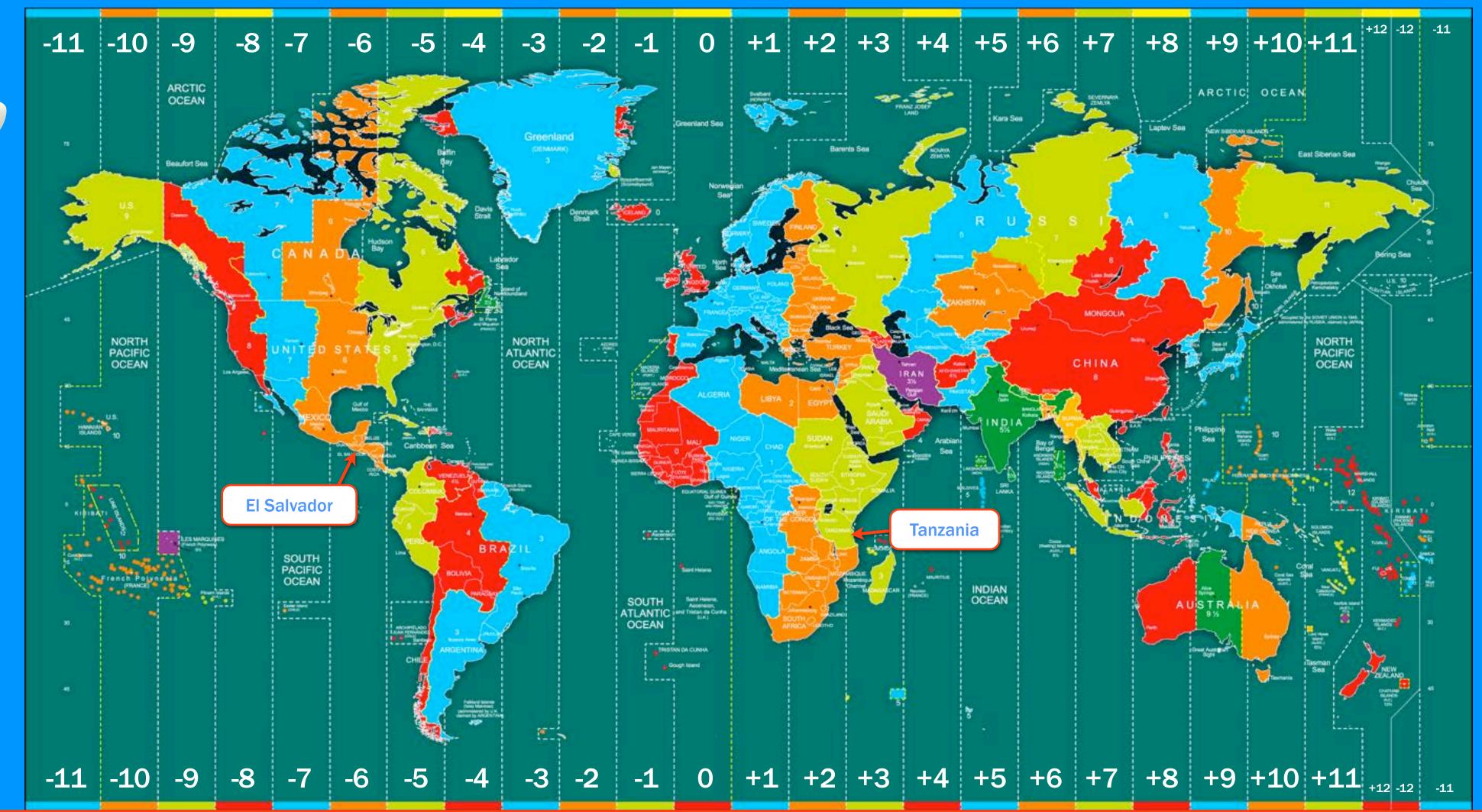


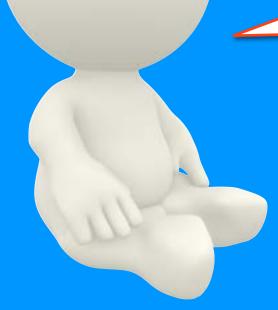






Can you work out what the time would be in the Tanzania if it was 2pm in **El Salvador?**







El Salvador is GMT-6 and Tanzania is GMT+3. This means if it is 2pm in El Salvador, it will be 8pm in the UK and therefore 11pm in Tanzania.

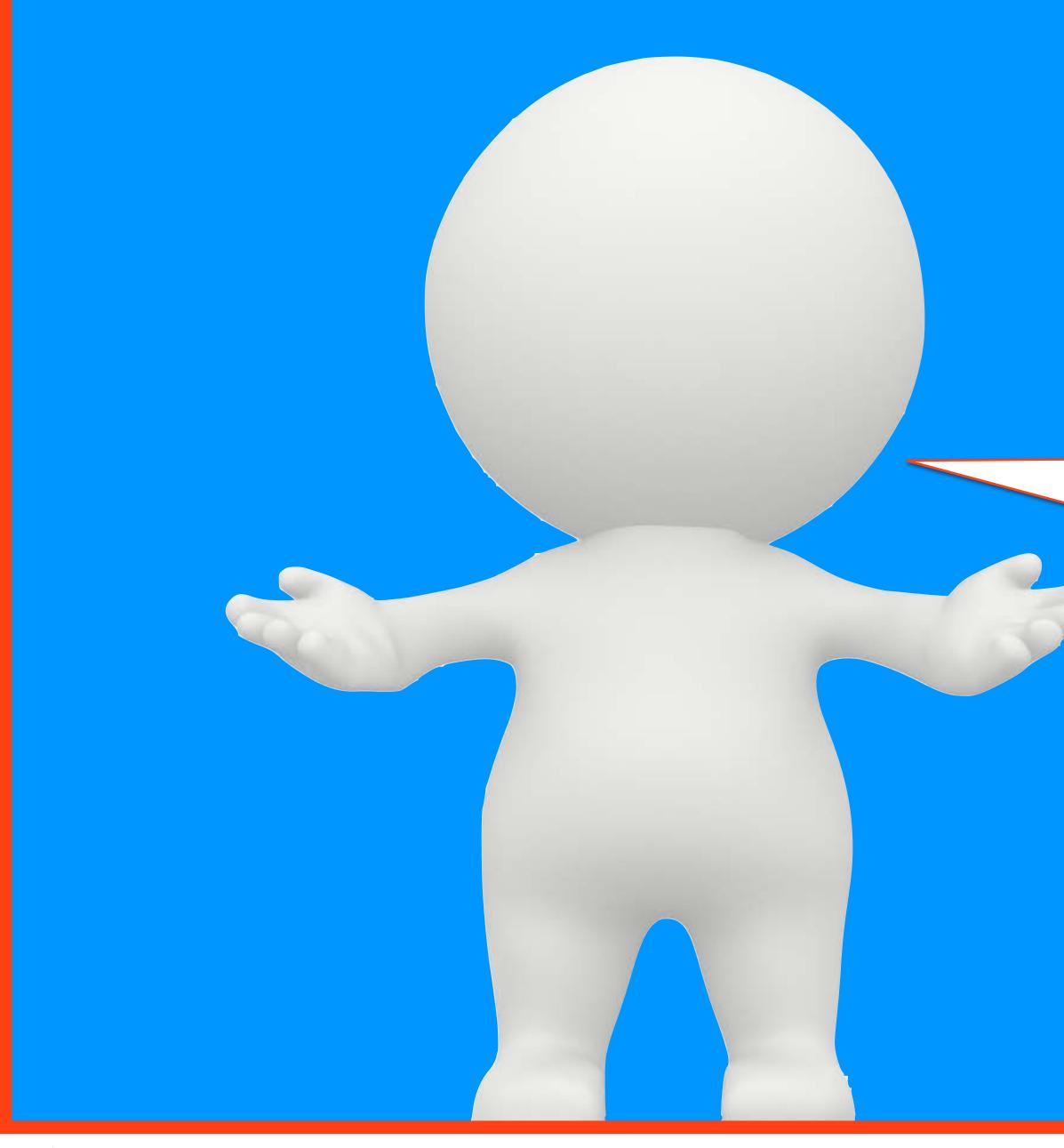












Phew! That was tricky! Are you ready to have a go by yourselves?

