Go to the Time Globe downstairs in Flamsteed House. Here you can investigate time zones and Greenwich Mean Time.

What is the imaginary line around the Earth that divides the world into the Northern and Southern hemisphere?

It is a line of latitude (horizontal imaginary lines), the vertical lines going from North Pole to South Pole are lines of longitude. Each one here is separated by 15 degrees.

How many degrees are in a circle?

How segments are there around the globe?
Let’s see if you can navigate the Time Globe and tell where you are:

**Move 15 degrees East from Greenwich (along the same latitude). Which country are you now in?***

- [ ] Poland
- [ ] Germany
- [ ] Sweden
- [ ] Czech Republic

**Move 37.5 degrees East from Greenwich (along the same latitude). Which country are you now in?***

- [ ] Russia
- [ ] Ukraine
- [ ] Belarus
- [ ] Finland

Have you been to a country where you had to change your watch forward or back? If so, can you say if you changed it forward or backwards and by how many hours?***

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Long ago people used a timepiece with no moving parts that uses light and shadow to tell their local time. Do you know what it was?***

*Hint: Two dolphins outside the exit of these galleries can tell you the time at the Observatory!***
Let’s see if you can work out the local time for a few destinations around the world. Note: Every degree you move is equal to 4 minutes local time difference. So if the time in London is 12:00pm then the time 1 degree east will be 12.04pm.

**Travel from Dover to Reykjavik in Iceland. Which direction did you need to travel in (East/West)? Are you behind or ahead of Greenwich Time? And by how many minutes?**

- East, Ahead, 60 mins
- East, Behind, 40 mins
- West, Behind, 90 mins
- West Ahead, 60 mins

**Travel from Dover to Seoul in South Korea. Which direction did you need to travel in (East/West)? Are you behind or ahead of Greenwich Time? And by how many hours?**

- West, Behind, 9.5 hours
- East Behind, 8.5 hours
- West, Ahead, 9.5 hours
- East, Ahead, 8.5 hours

This gallery tells the story of accurate measurement of longitude at sea. See if you can find the two stories that eventually solved the Longitude Problem – one centred on time and the other on astronomy.