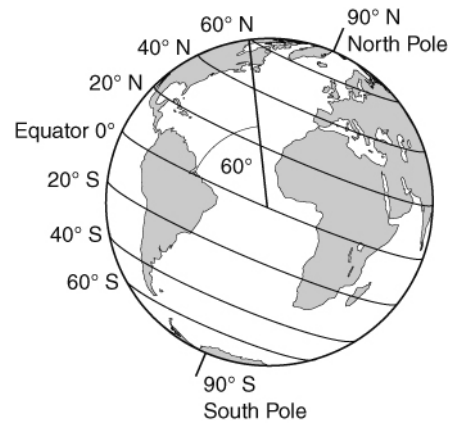


In the UK, there are more hours of daylight in the summer than in the winter.

- Is this true everywhere in the world?
- How does the latitude of a place affect the amount of daylight it gets at different times of year?

Prediction

- How do you think the number of hours of daylight in the summer changes as you go further north or south from the UK? Explain your prediction if you can.
 - How do you think the number of hours of daylight varies from north to south in the winter? Explain your prediction if you can.

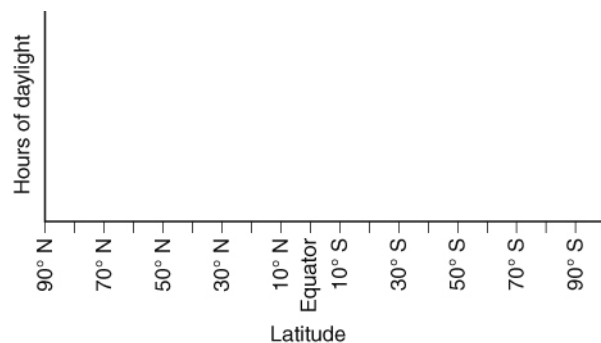


Latitude is a way of measuring how far north or south a place is. The Equator is at a latitude of 0° and the North Pole is at 90° N. London is at a latitude of 51.5° N.

You can test your prediction by finding information about the sunrise and sunset times at different places, and comparing them.

Testing your prediction

- Which places will you find sunrise and sunset times for?
 - You may need to use an atlas to pick some suitable places.
 - Note down the name of each city you decide to use, and its latitude (how far north or south of the Equator it is). You only need to write down the latitude to the nearest degree.
 - Look at the hints for presenting your data in question 5 before finalising your list of places.
- How much information will you need for each place? It may be enough to take information for only one day each month. How will you make sure your comparisons are fair?
- Find the information you need. If you do this on the internet, a useful search phrase is 'sunrise/sunset predictions'.
- How are you going to present your data? You could:
 - draw a bar chart for each place, showing the number of hours of daylight each month. If you draw bar charts, how can you make sure it is easy to compare the charts for different places?
 - draw a scatter graph of latitude against the hours of daylight for January and for June (so you have two lines on your graph). Your axes would look something like this:



Considering your evidence

- Were your predictions correct?
- Try to explain the patterns you have found.

I can...

- make predictions and justify them
- find information from secondary sources
- present data and draw conclusions from it.