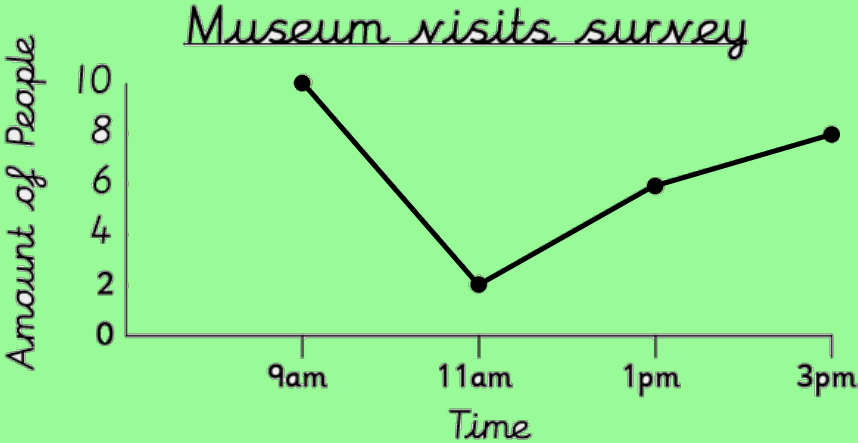


21.10.2021

L.O. To read and interpret line graphs

How might this graph differ to a bar chart?



Line graphs are used to represent continuous data (data that is measured over time, such as your height). They are not used to represent discrete data (data that is counted, such as the amount of computer games you own).

Which of the following can be represented on a line graph?

The temperature throughout the day

Your favourite books

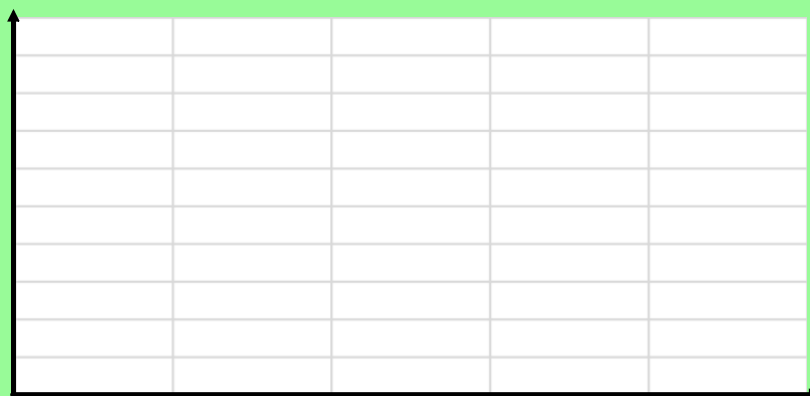
How much money an ice cream stall makes in a week

The height of a plane throughout a flight

Your classmates' birthdays

Axes are the *horizontal* and *vertical* lines used to frame a graph or chart:

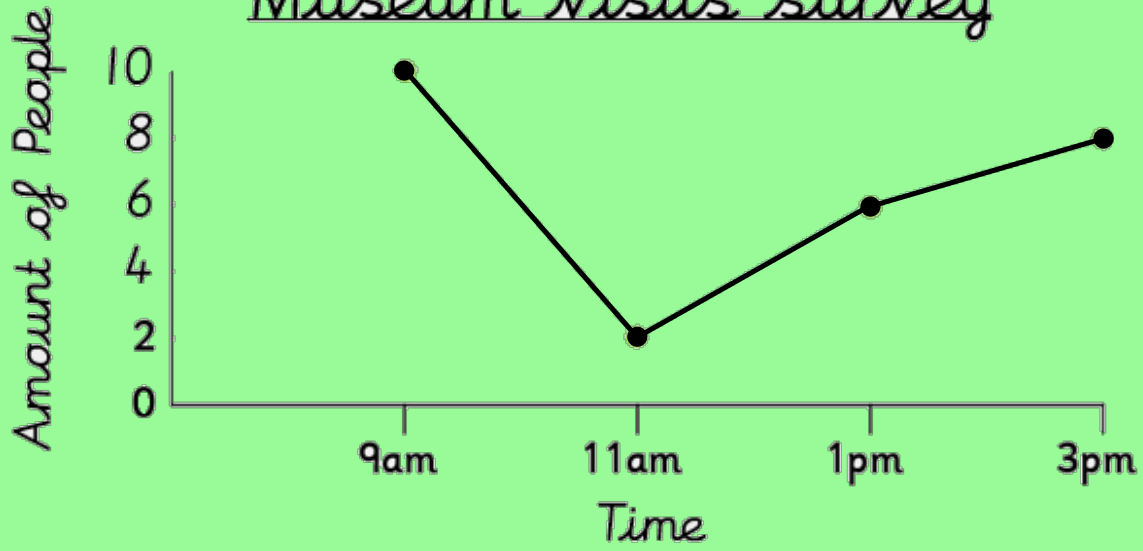
This is the vertical axis or the 'y axis'.

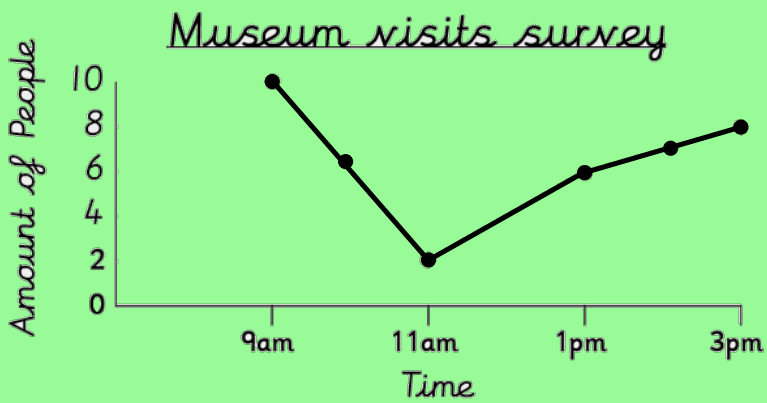


This is the horizontal axis or the 'x axis'.

This line graph shows the amount of people visiting New York City Museum throughout the day.

Museum visits survey





What time did 2 people visit the museum?

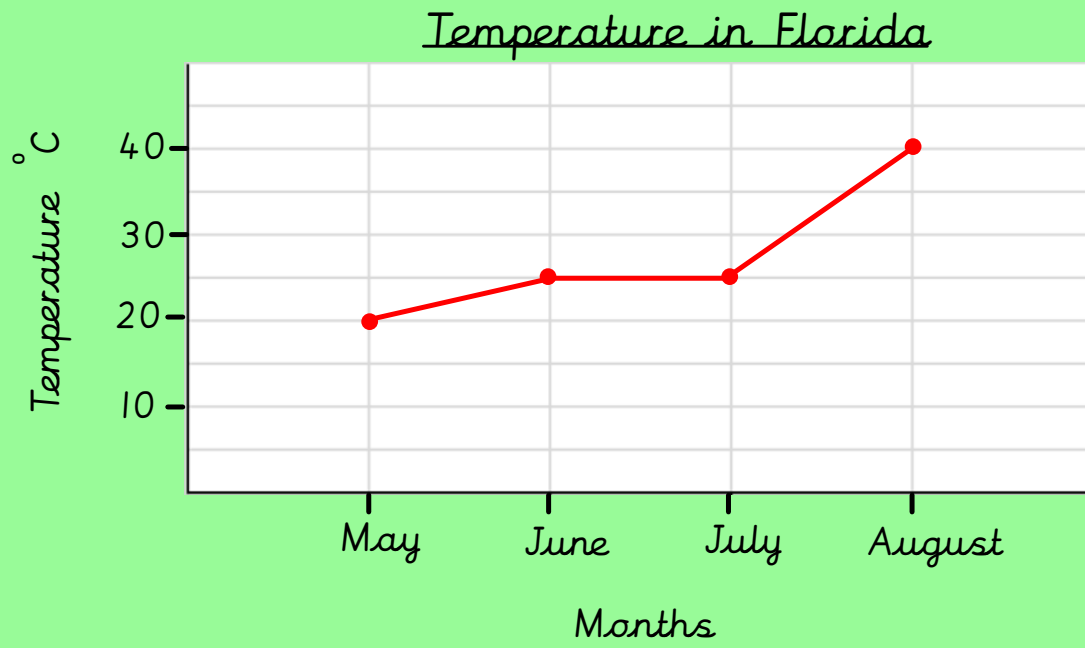
How many people visited the museum at 1pm?

How would you work out what time it was when 8 people visited the museum?

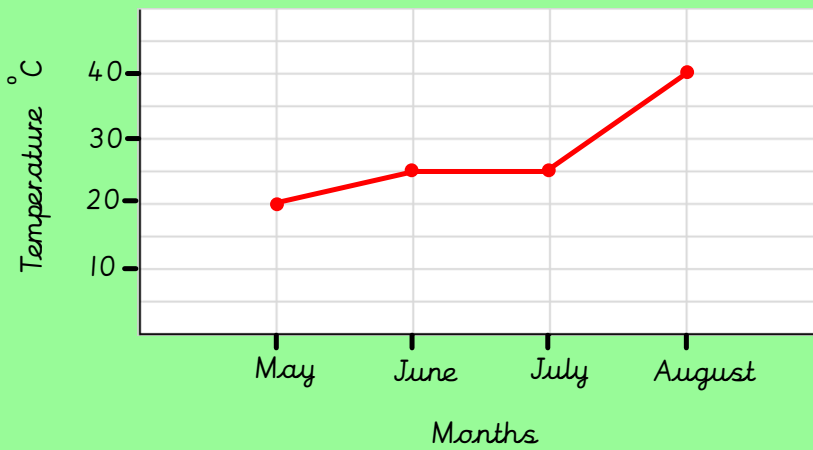
How would you check how many people visited the museum at 10am?

How would you work out what time it was when 7 people visited the museum?

This line graph shows the _____.



Temperature in Florida



What was the temperature in August?

Which is the coldest month?

How would you work out what temperature it was in June?

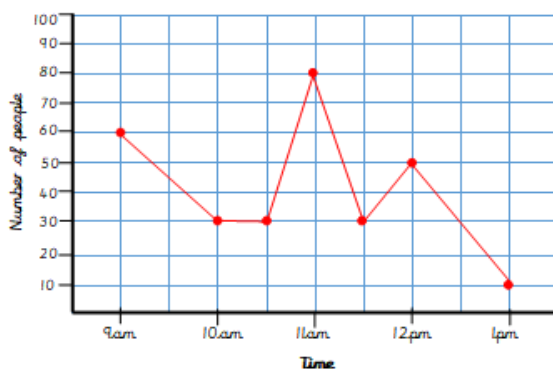
Which months saw the highest increase in temperature?

What has happened to the temperature in June and July?

How much did the temperature rise between June and August?

L.O. to interpret line graphs

A graph to show how many visitors attended New York City Museum

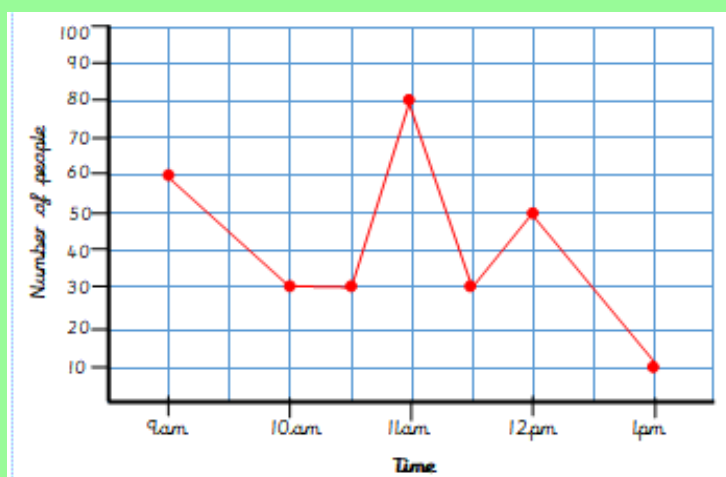


1. What does the X axis show? _____
2. What does the Y axis show? _____
3. What time did 80 people visit the museum? _____
4. How many people visited the museum at 12pm? _____
5. At what time did 10 people visit the museum? _____
6. How many people visited the museum at 9am? _____
7. What time was the **most** popular to visit the museum? _____
8. What time was the **least** popular to visit the museum? _____
9. 30 people visited the museum at 12:30pm. **Plot this on the graph using an X.**
10. 70 people visited the museum at 1:30pm. **Plot this on the graph using an X.**
11. What does the straight line between 10:00am and 10:30am represent? _____
12. How many more people visited the museum at 11am than 10:30am? _____

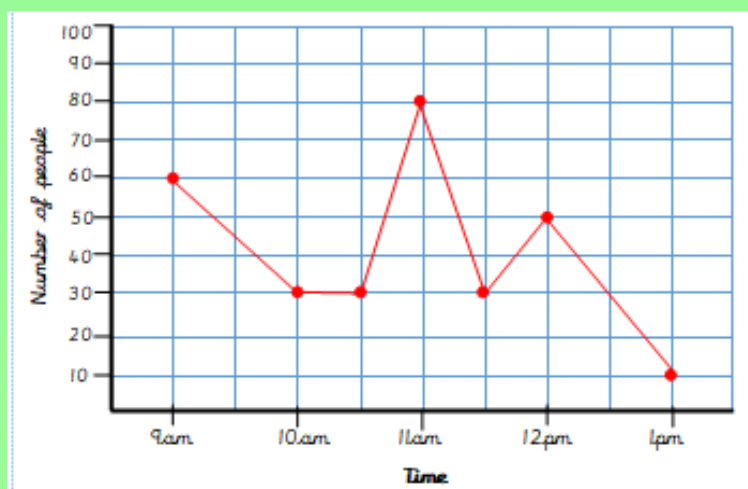
Interpret the line graph and answer the questions.

Next Step:

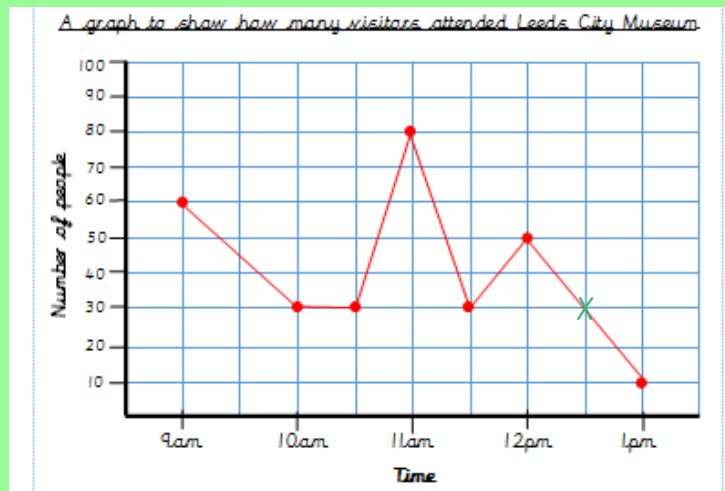
Write and answer three of your own questions using the line graph.



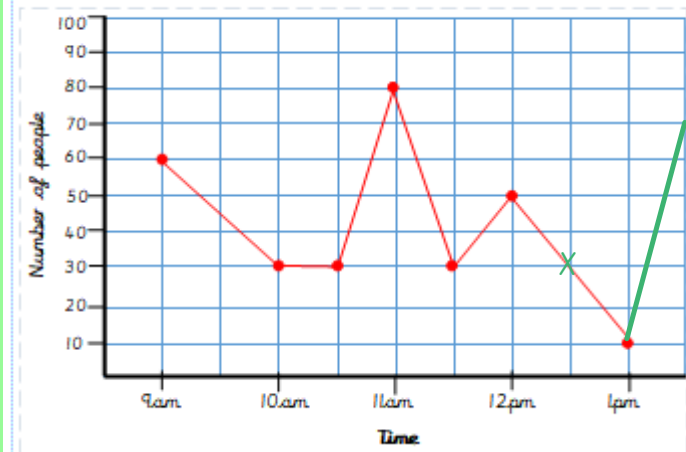
1. What does the X axis show?
Time
2. What does the Y axis show?
Number of people
3. What time did 80 people visit the museum?
11am



1. How many people visited the museum at 12pm? 50
2. At what time did 10 people visit the museum? 1pm
3. How many people visited the museum at 9am? 60



1. What time was the most popular to visit the museum? 11am
2. What time was the least popular to visit the museum? 1pm
3. 30 people visited the museum at 12:30pm. Plot this on the graph using an X.



1. 70 people visited the museum at 1:30pm. Plot this on the graph using an X and join it to the rest of the data using a line.
2. What does the straight line between 10:00am and 10:30am represent? The amount of people visiting the museum stayed the same.
12. How many more people visited the museum at 11am than 10:30am?

50

