week 6

Working Scientifically

LO: To present my results

I know which type of graph to use

I can choose a sensible scale

I understand how to use my graph to ask and answer questions

This week you need to draw a graph for your results last week.

Make sure you have calculated a mean for your results.

What will be on the X axis?
What will be on the Y axis?

Will it be a bar chart or a line graph?

Use graph paper - copy for your own class if needed

Bar Charts

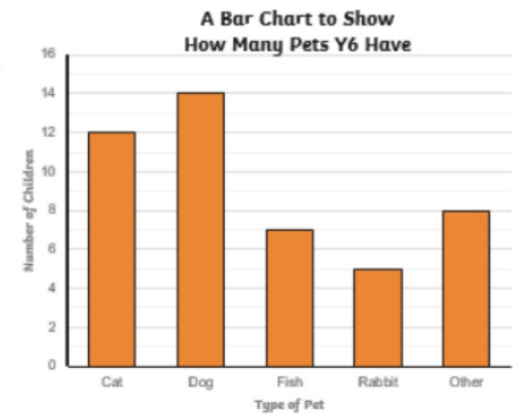
Data that is counted and has no in-between value is called **discrete data**. Discrete data is usually collected in a frequency table and then presented as a bar chart.

Pet	Number of Children
Cat	12
Dog	14
Fish	7
Rabbit	5
Other	8

A bar chart has a **horizontal** axis and a **vertical** axis.

- A bar chart must always have a **title** explaining what it shows.
- Bars must be carefully drawn to show the data.
- There must be a **gap** between each bar.
- Each bar must be the **same width**.

A **number line** is marked on the **vertical** axis. The scale of this number line is chosen based on the data range.
The **data categories** are organised on the **horizontal** axis.
Each axis must have a **label** explaining what it shows.



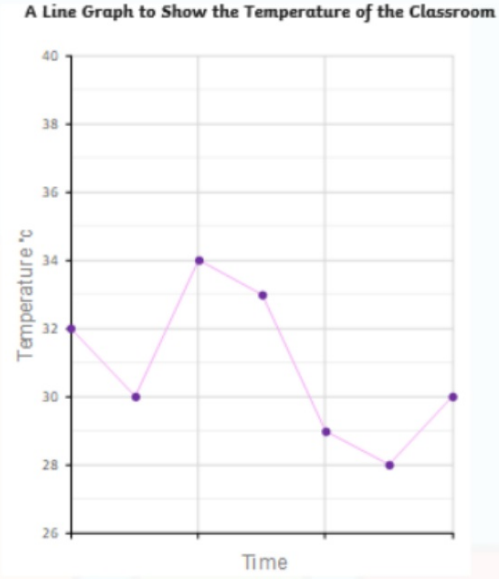
Line Graphs

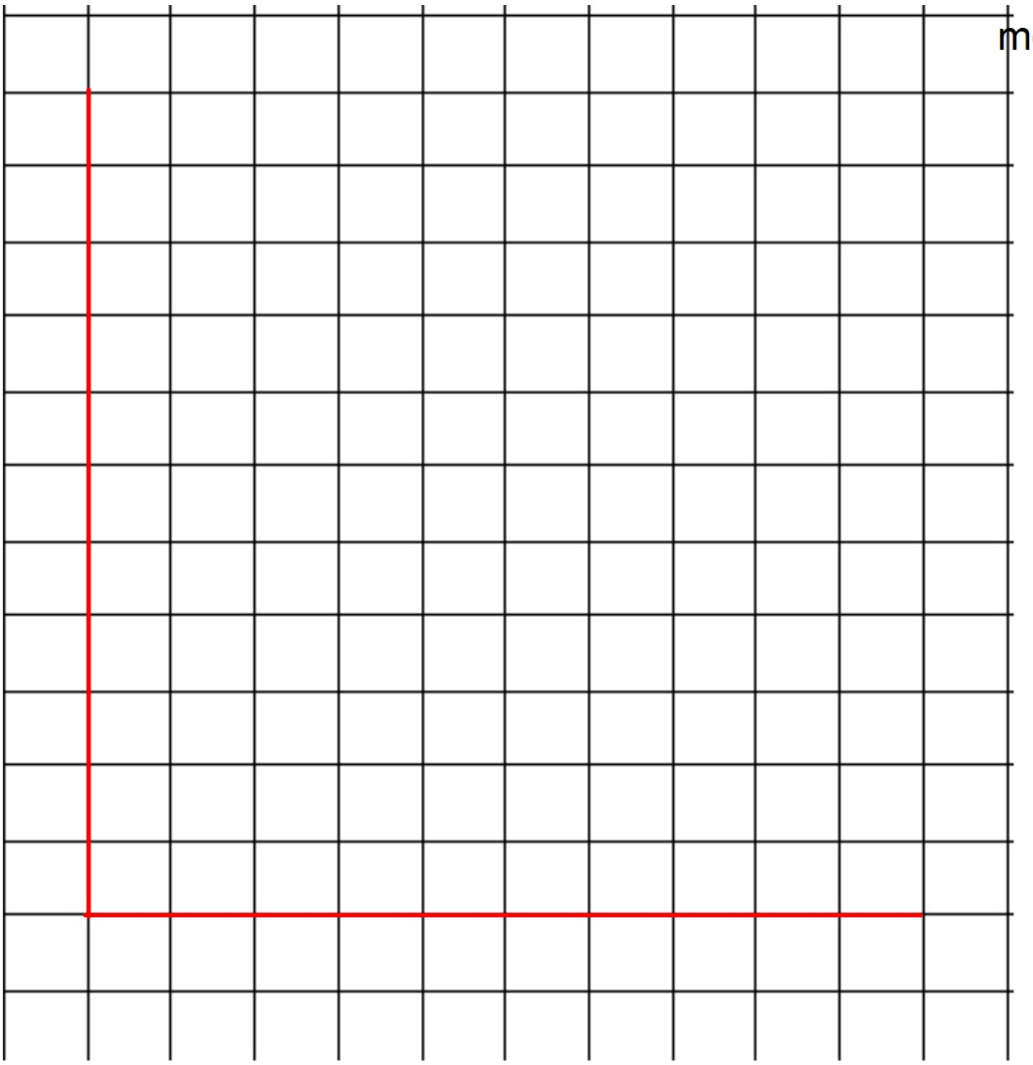
Line graphs are used to show changes to a measurement over time. They show **continuous data**.

The data being measured is shown on the **vertical** axis.
The time the data is being measured over is shown on the **horizontal** axis.

Data is plotted on to a line graph in the same way as a coordinate grid. These data plots are then joined with straight lines.

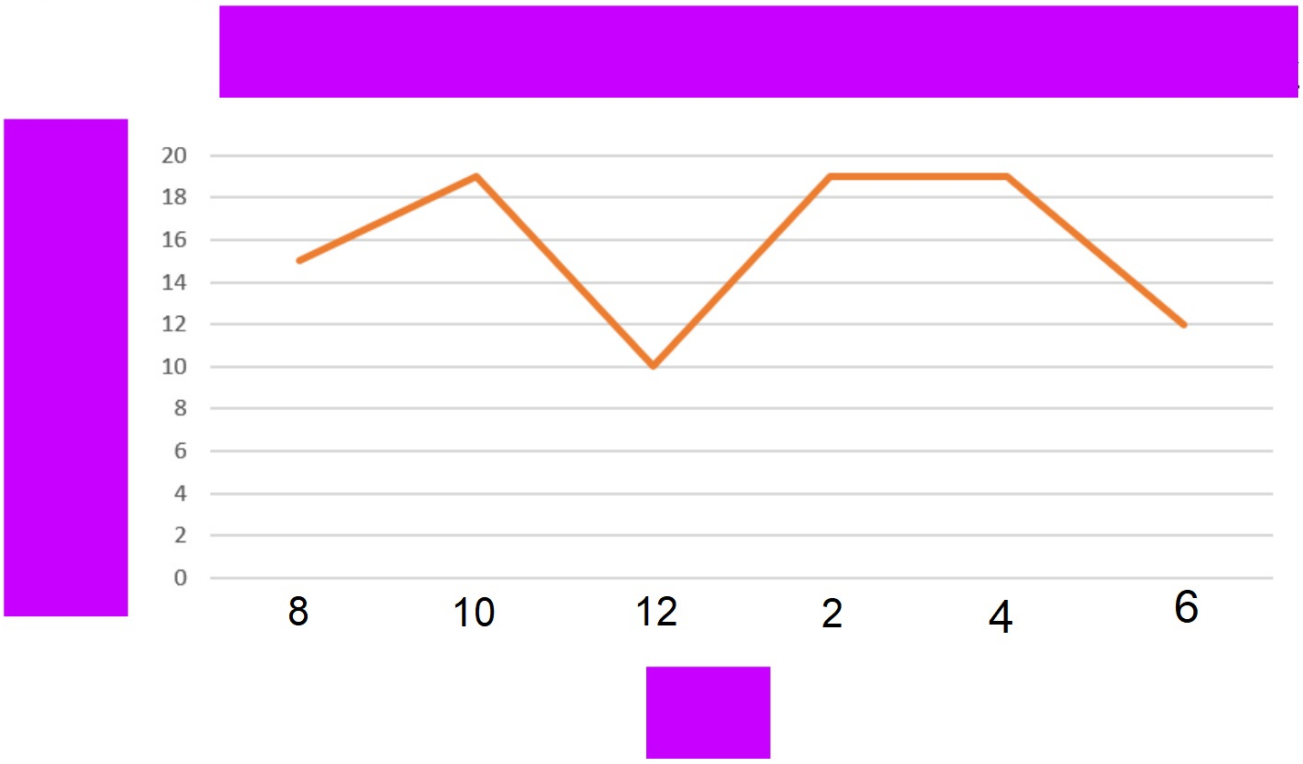
We can use the line of the graph to describe general trends in the change of the measurement over time, or to find precise measurements at a given time.



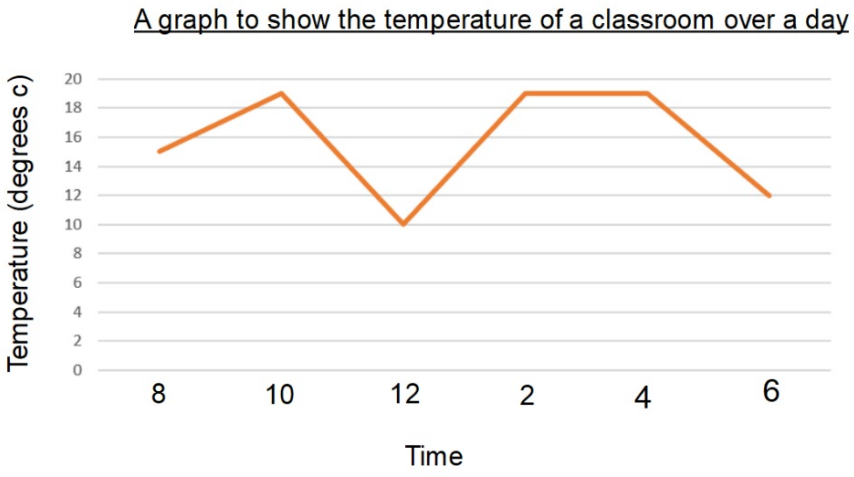

model graph dra

What could this graph be about?
What is the story of the graph?
What would the X and Y axis be?
What would the title be?

Reveal the title and discuss the graph story



What questions can we can we ask about the graph?



Record class ideas and screen shot for books