



Drawing Lines and Curves of Best Fit

Drawing a line or curve of best fit for the data on your graph allows you to identify any relationships or patterns in your results.

A line or curve of best fit also allows you to predict further data, based on the pattern you identify.

How to Draw a Line of Best Fit

Start by looking at the data points and asking yourself the following questions:

- Can you see a trend or pattern easily?
- Is there any obvious correlation in the data?
- Do the points seem to make a line or are they spread out over in a big area?
- Are there any anomalous results?

If you can see a pattern in the data points and the pattern appears to be **linear** (straight), then you can draw a **line of best fit**.

- a. Use a sharp pencil and a ruler to draw a **straight line**.
- b. The line should not join the data points together, but instead aim to have an equal amount on either side of the line or pass through as many points as possible.
- c. Ignore any anomalous results when positioning the line of best fit.
- d. The line does not have to pass through the origin.

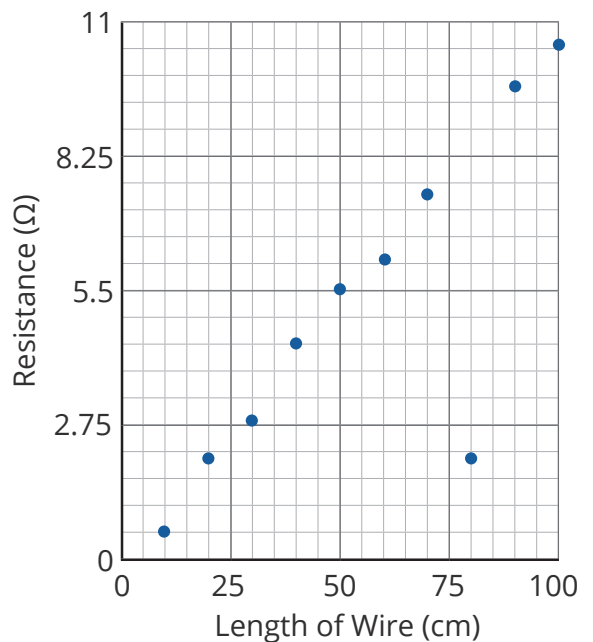
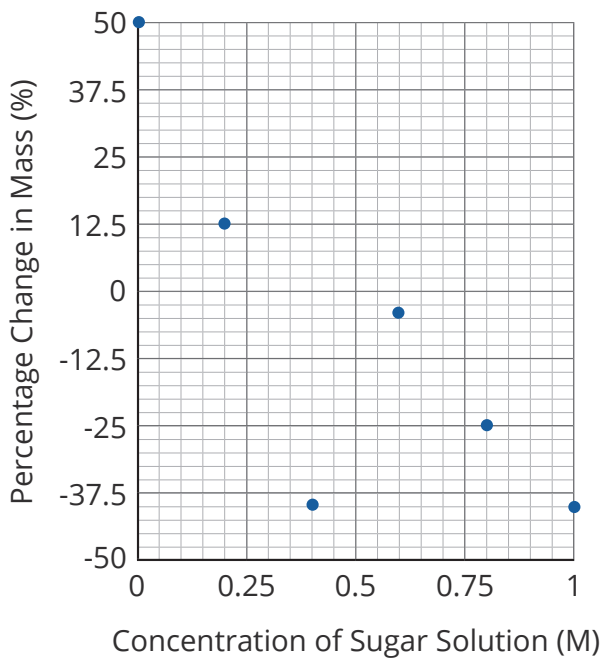
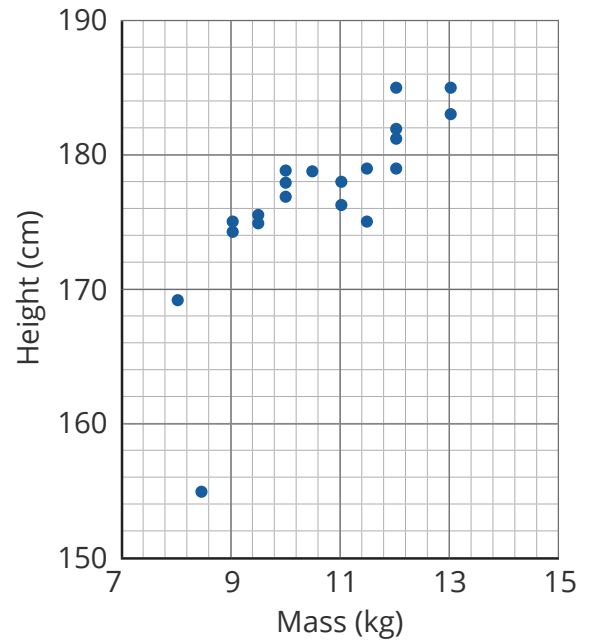
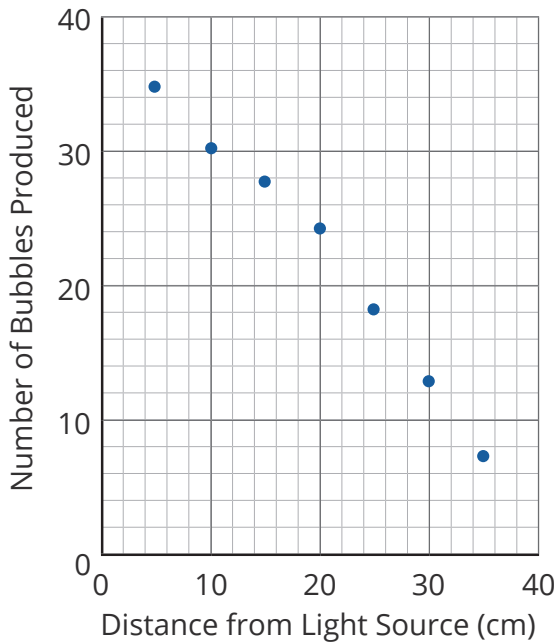
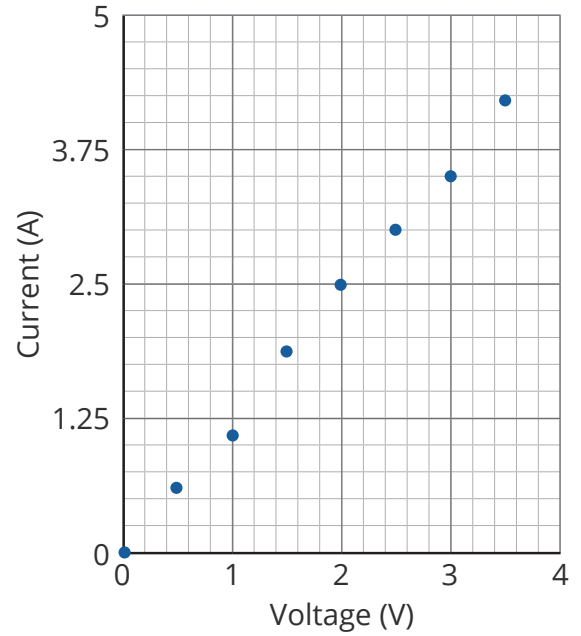
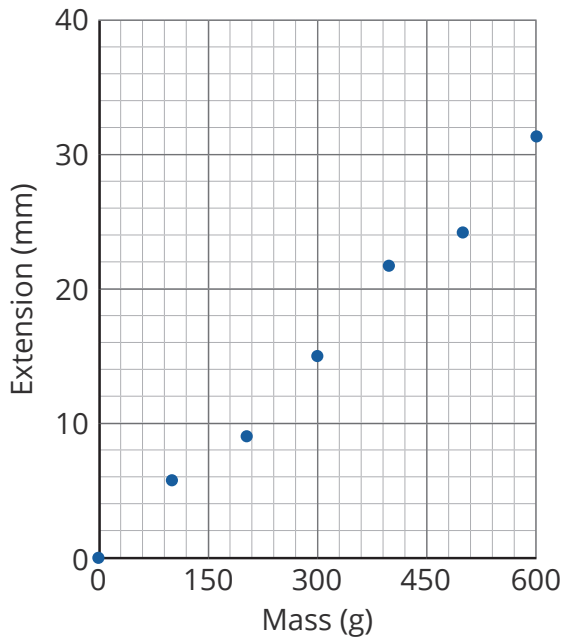
How to Draw a Curve of Best Fit

If you can see a pattern in the data but it is **not linear**, then you should draw a **curve of best fit**.

- a. Use a sharp pencil to draw a **smooth curve**.
- b. The curve does not need to join the data points together perfectly but should pass through as many points as possible.
- c. Ignore any anomalous results when positioning the line of best fit.
- d. The curve does not have to pass through the origin.

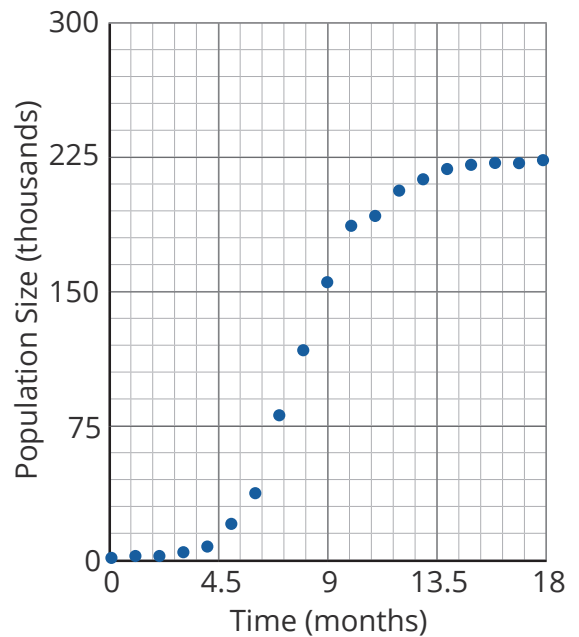
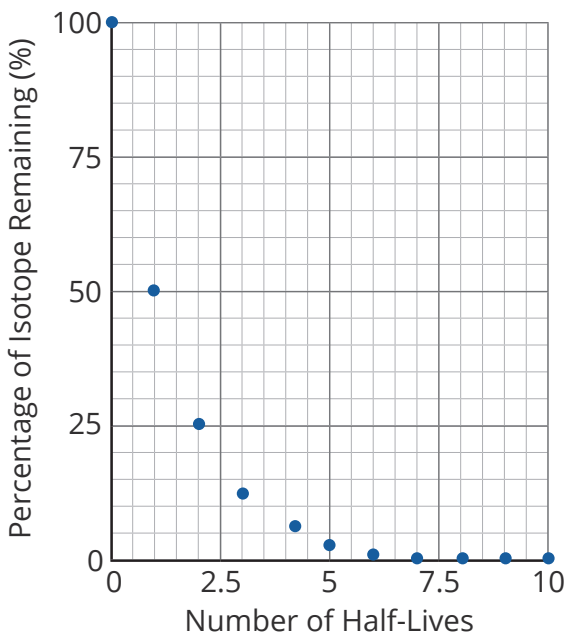
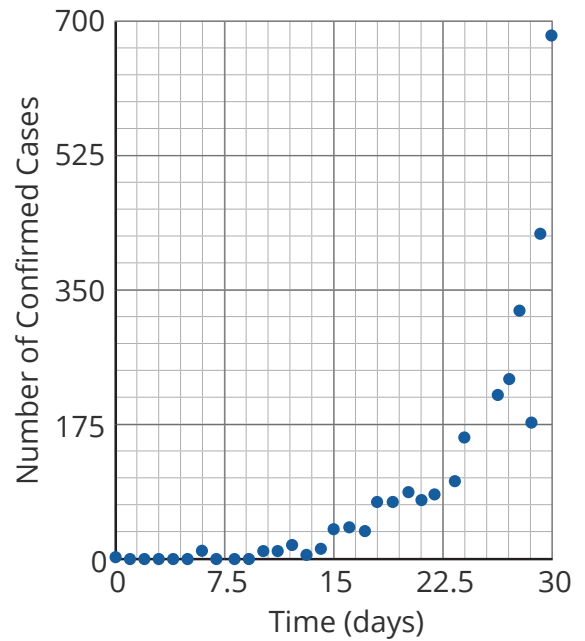
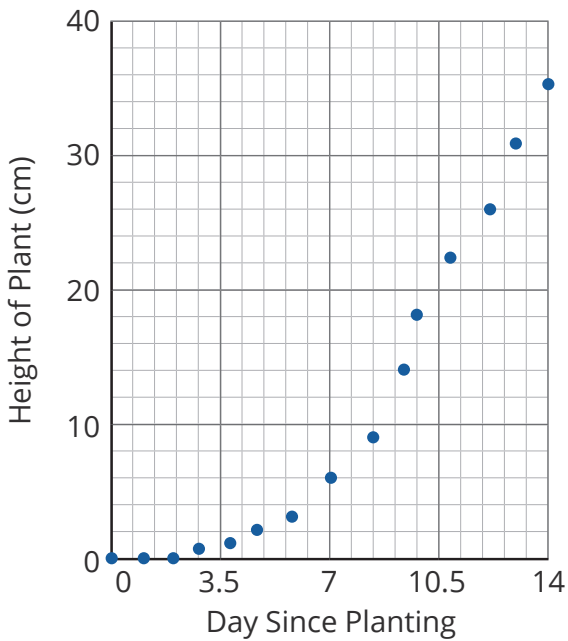
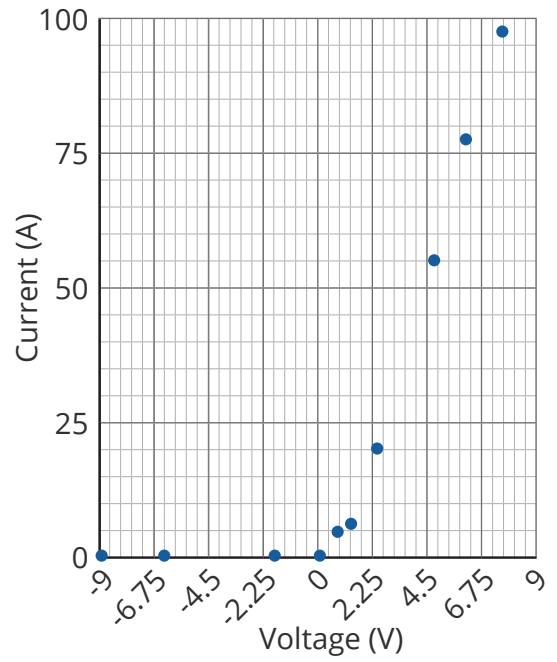
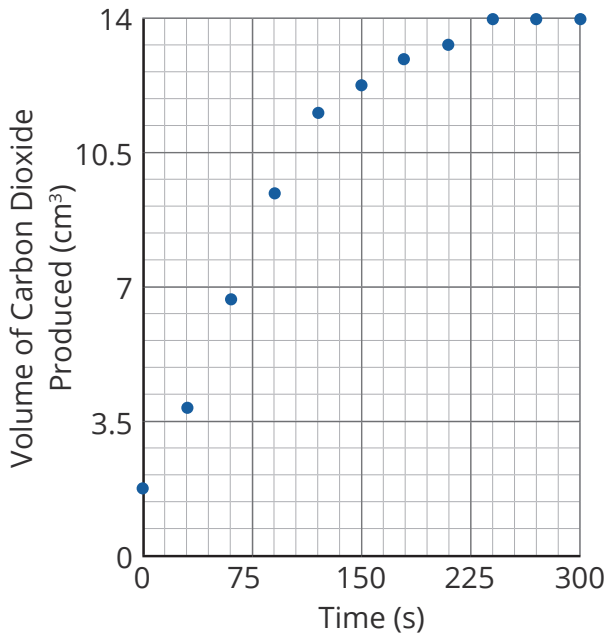


For each graph, draw a line of best fit.



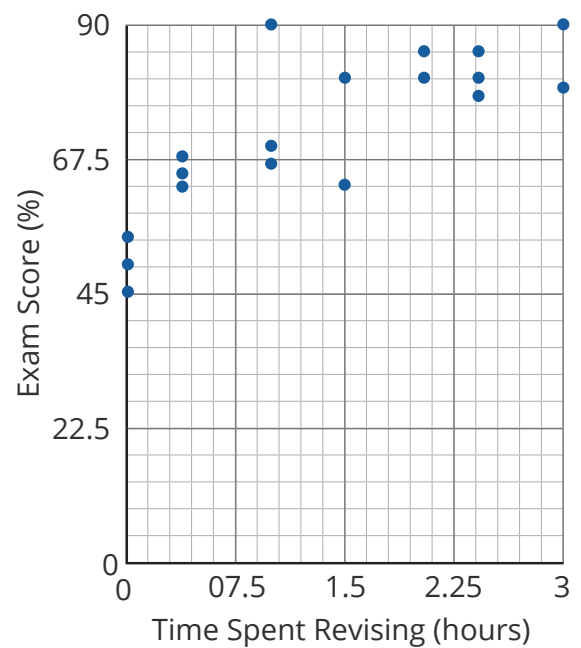
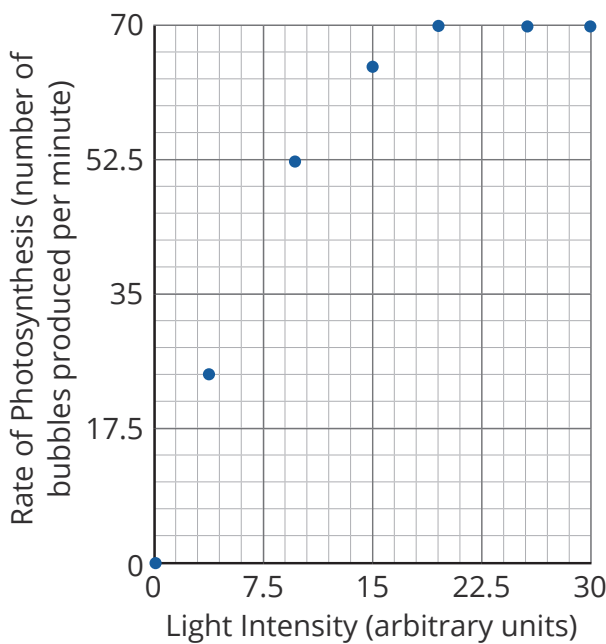
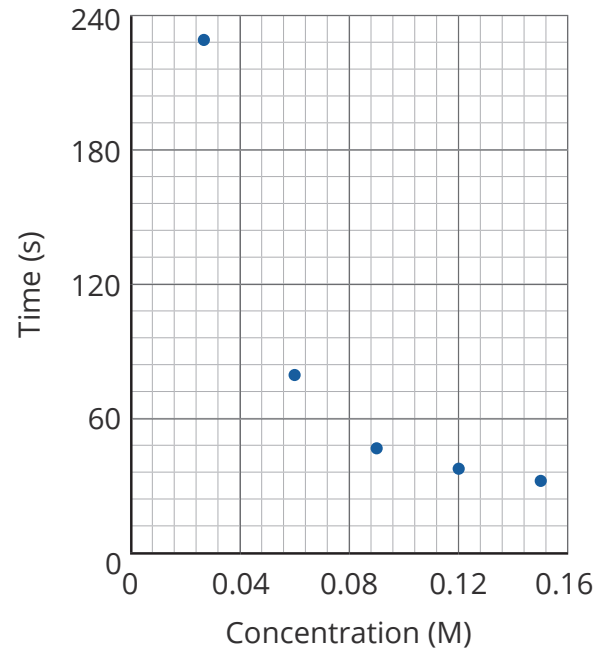
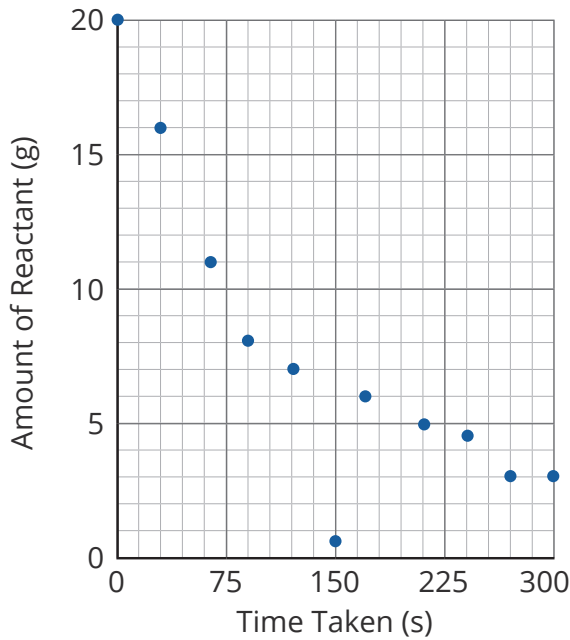
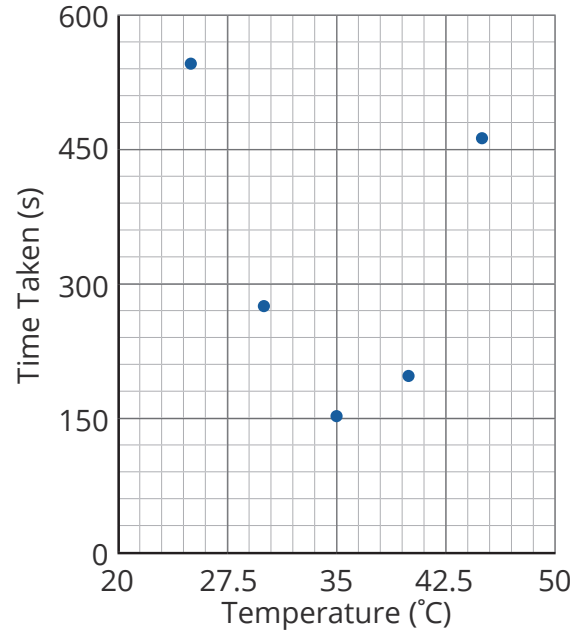
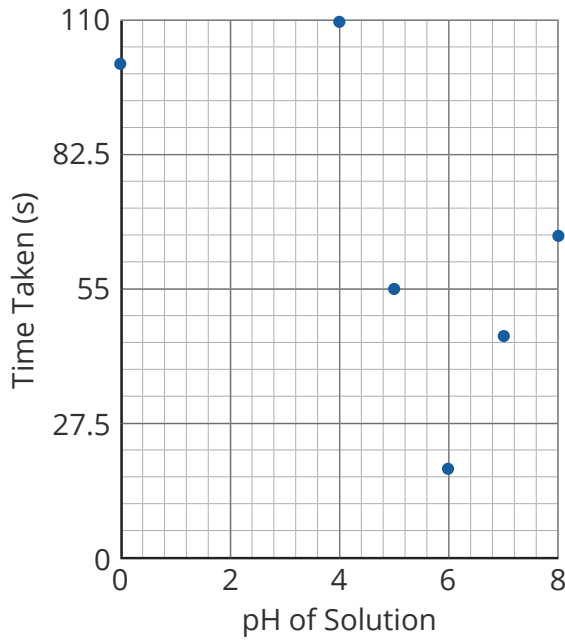


For each graph, draw a curve of best fit.



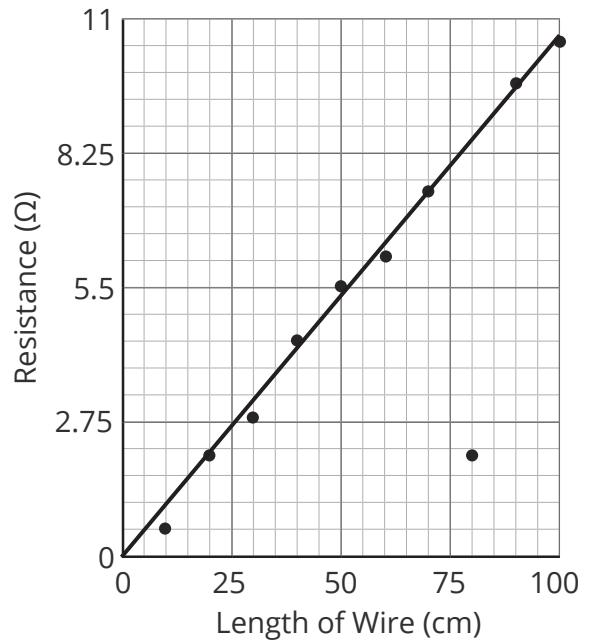
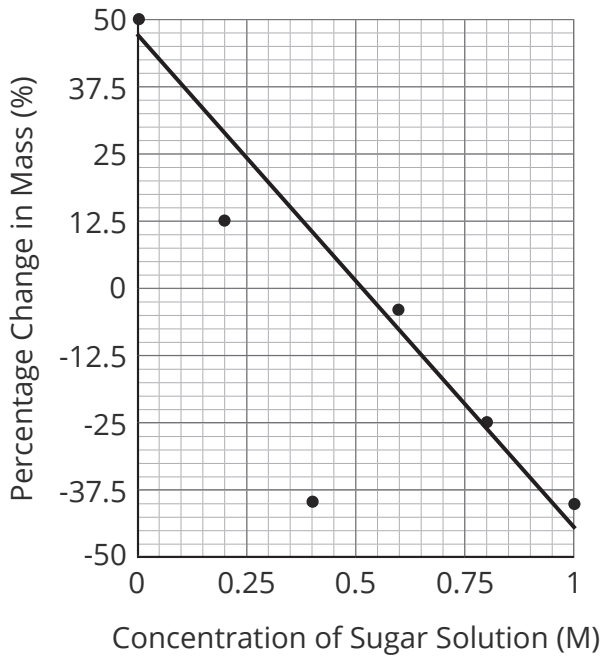
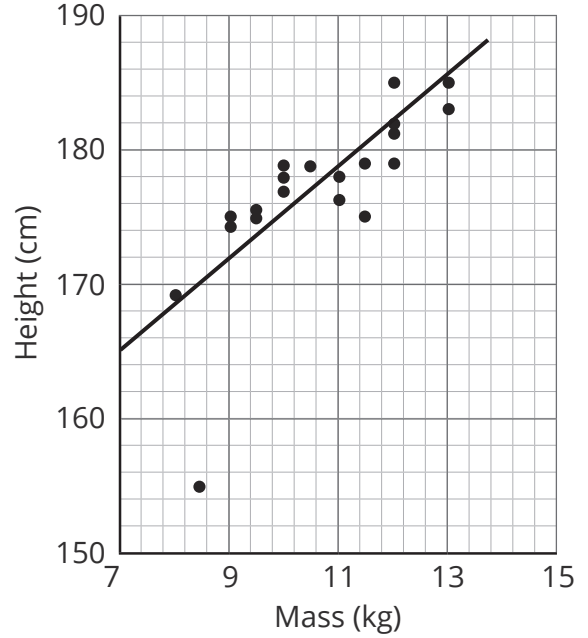
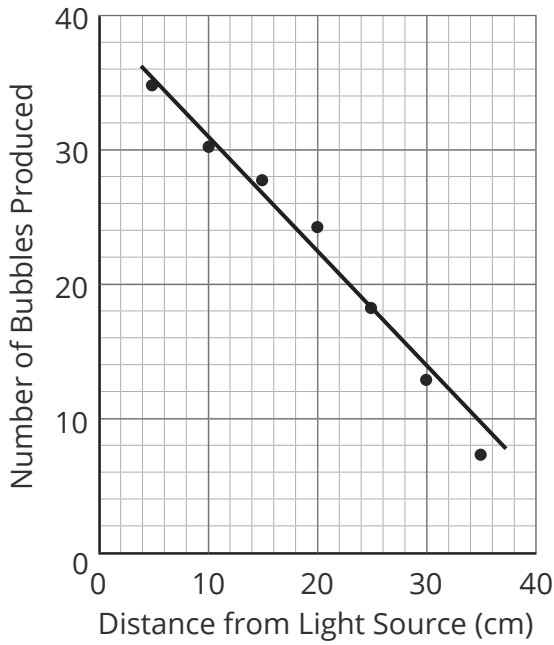
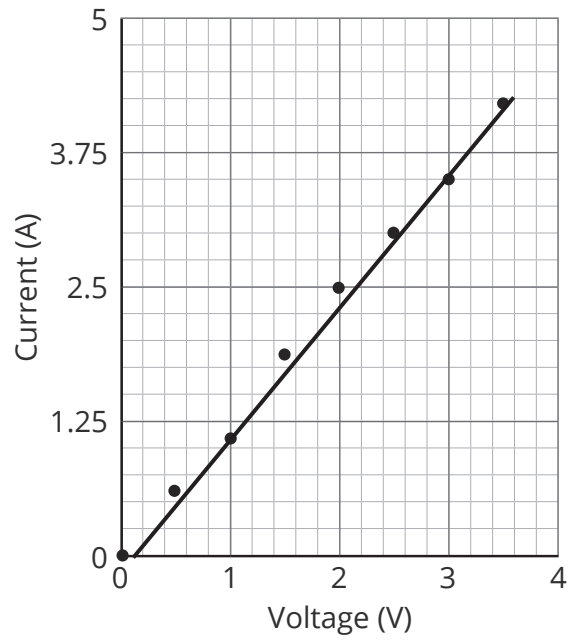
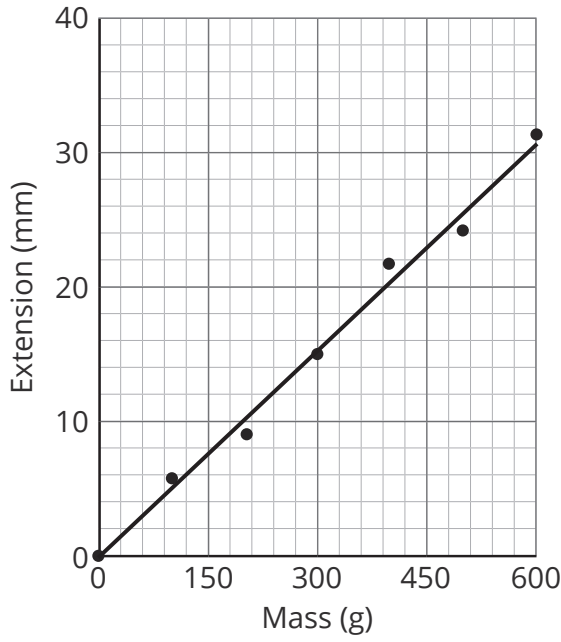


For each graph, decide whether to draw either a line or a curve of best fit.



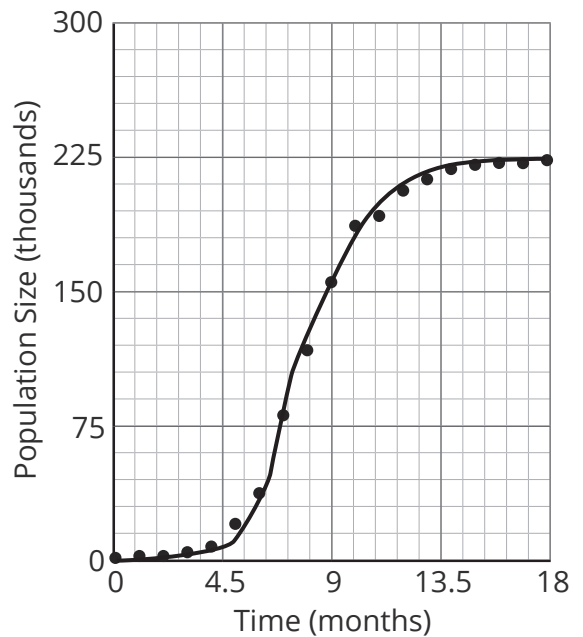
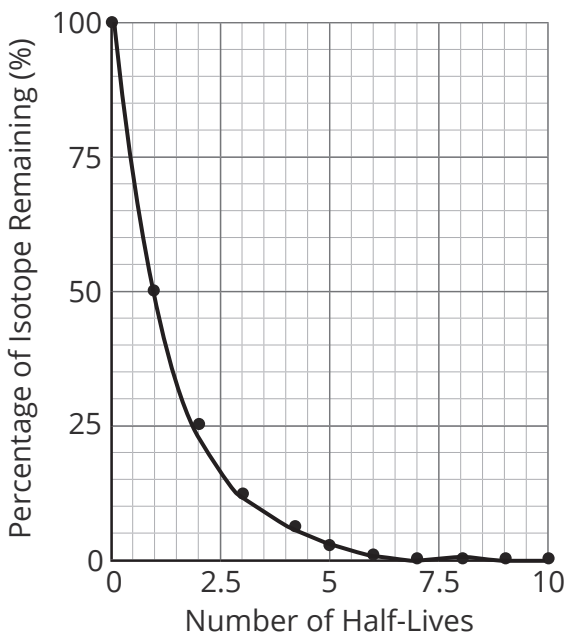
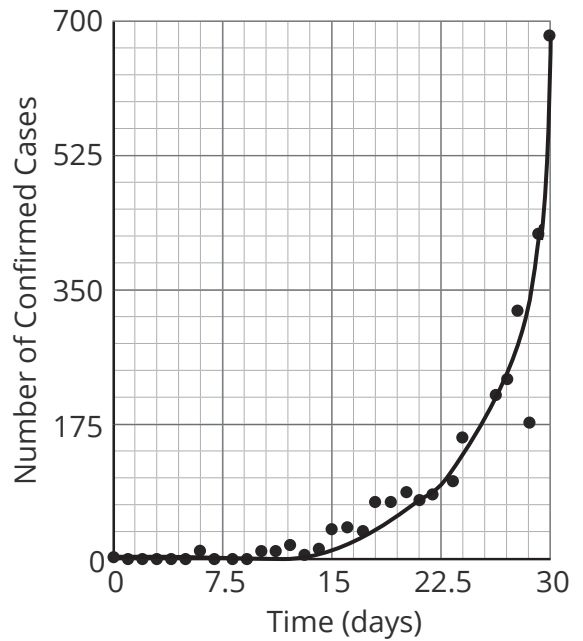
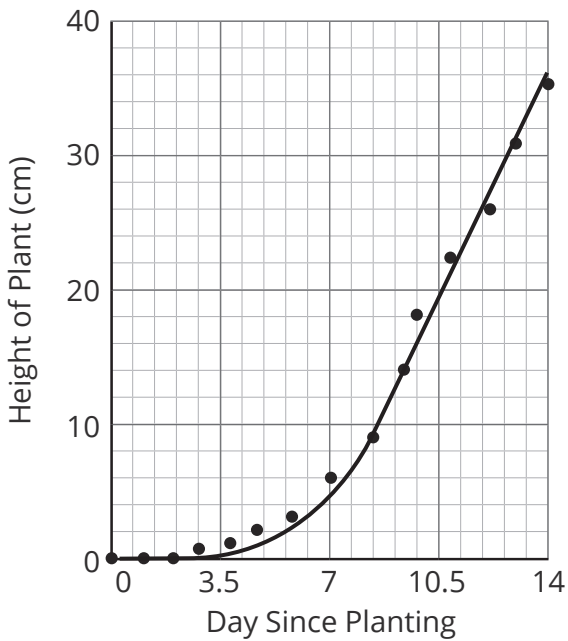
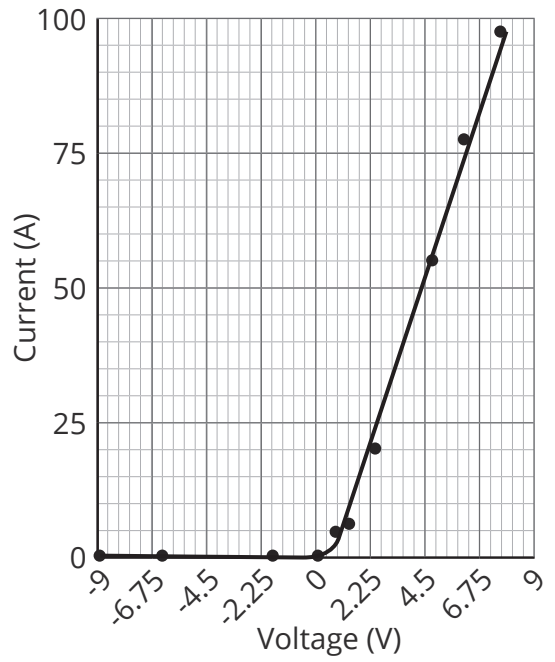
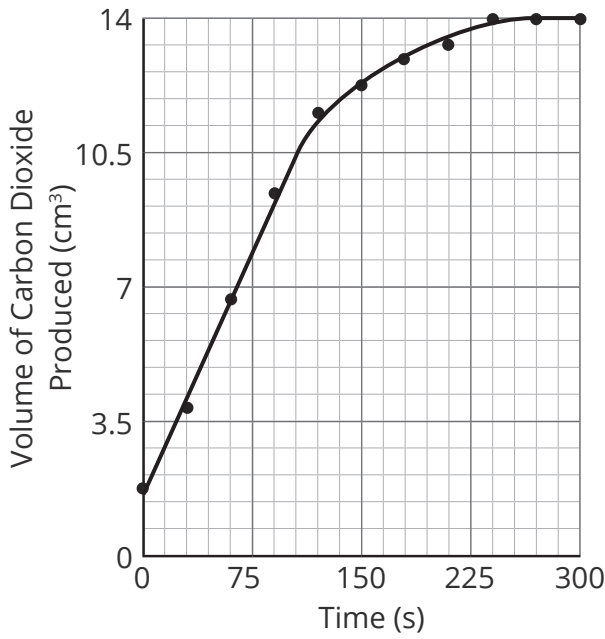


For each graph, draw a line of best fit.





For each graph, draw a curve of best fit.





For each graph, decide whether to draw either a line or a curve of best fit.

