The Greenhouse Effect

> You need: a calculator (optional)

Dr Rose Gardiner has developed a new plant food that she thinks will make plants grow more quickly.

For her glasshouse trial, she measures tomato seedlings every 8 days and records their growth in centimetres. She has already found that the plants grow at a steady rate.

She finds that a plant food already on the market makes plant A grow 0.25 centimetres a day, whereas her plant food makes plant B grow 0.5 centimetres a day. The control plant, which does not get any plant food, grows 0.125 centimetres a day.

The tomato plants were measured at the start of the experiment. The control plant was 3.5 centimetres, plant A was 2.75 centimetres, and plant B was 2.25 centimetres.

1. Draw a chart to record plant growth for 8 days.

Day	Control	Plant A	Plant B
Start	3.5	2.75	2.25
1			
2			
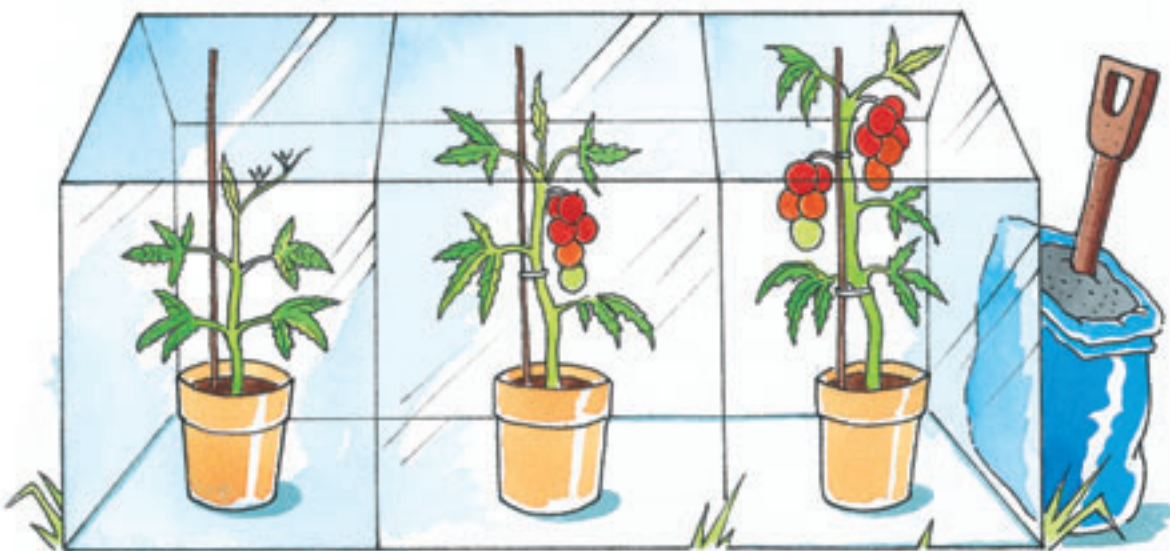
2. Find a quick way to work out how tall each plant will be 32 days from the start of the experiment. Explain how you worked it out.

3. a. Suppose plant A had been fed plant B's food on day 1, plant A's food on day 2, plant B's food on day 3, plant A's food on day 4, and so on.
      Record plant A's growth for 8 days.
   b. What will it measure after 32 days?