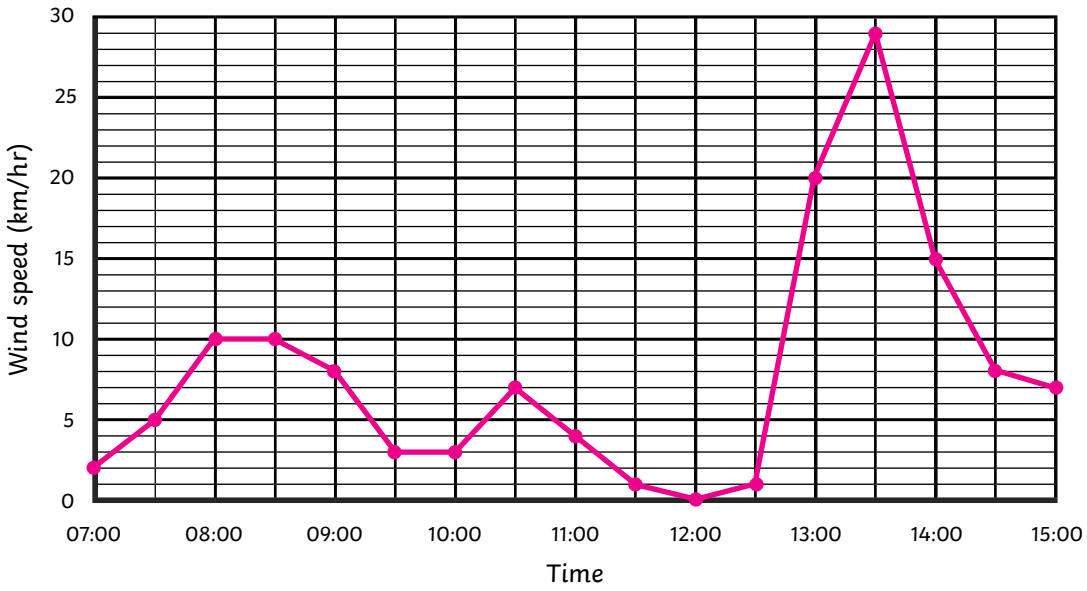
1)

A Line Graph to Show Wind Speed over Time



a) What was the difference in wind speed at 9:00 compared to 14:00? _____

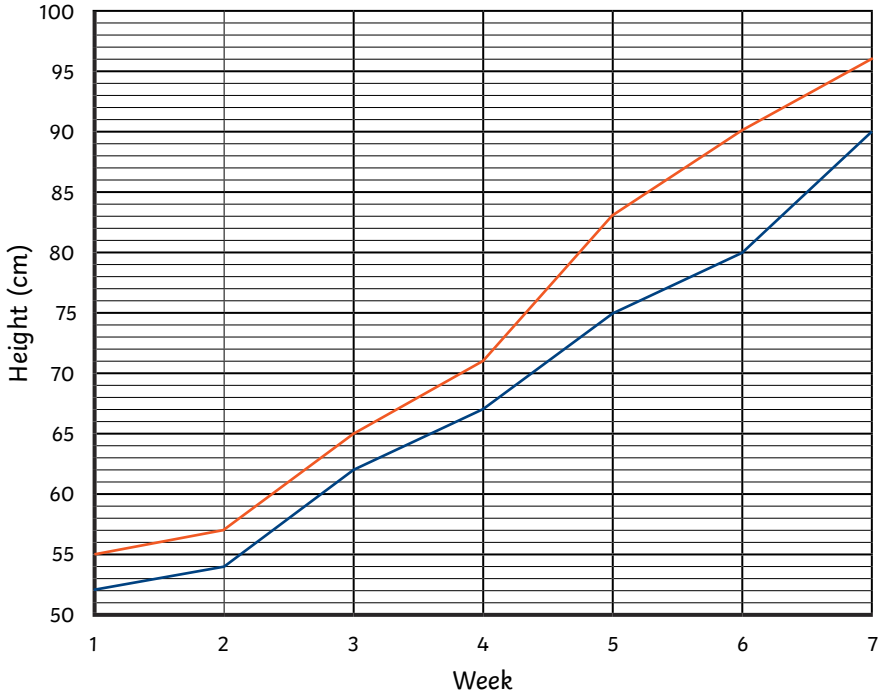
b) How many hours did it take for the wind speed to become twice as fast as it had been at 08:00? _____

c) How much did the wind speed decrease between 08:45 and 10:15 _____

d) At what time did the wind speed first reach 11km/hr? _____

2)

A Line Graph to Show the Height of Two Sunflowers over Time



Key/Legend

= height of sunflower 1

= height of sunflower 2

a) How much taller had sunflower 1 grown than sunflower 2 by the end of the time shown?

_____

b) What height had each sunflower reached after 3 weeks?

_____

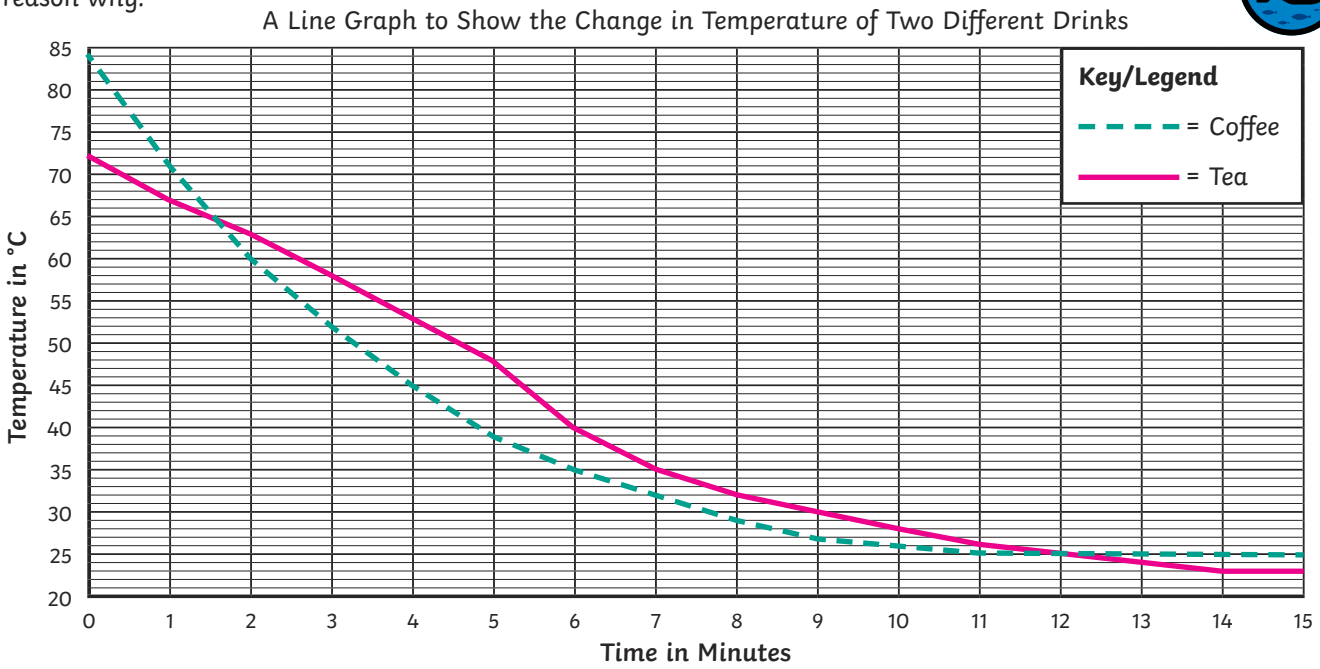
c) In which week was the difference in height between the sunflowers the greatest? Give the difference in centimetres.

_____

d) Compare the growth of both sunflowers from the start of week 4 to the end of week 5. Which sunflower grew the most and by how much?

_____

1) Decide if the statements about the line graph are true or false. If they are false, explain the reason why.



a) The drink that started with the higher temperature ended the 15 minutes with the higher temperature.

b) The two drinks never had the same temperature at the same time.

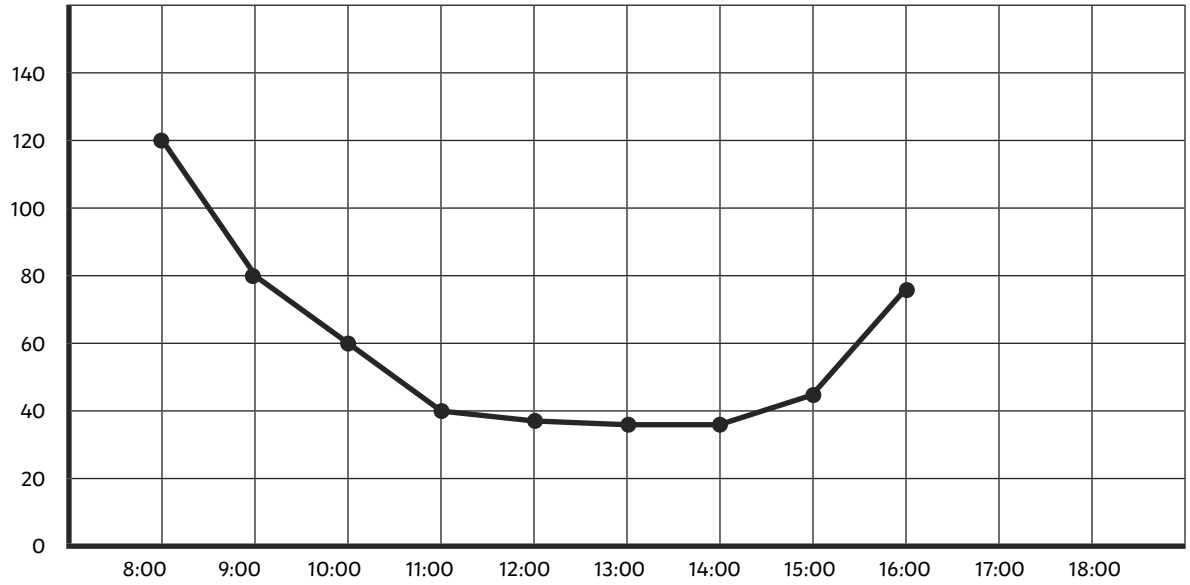
c) The greatest difference between the temperature of the two drinks was 9°C.

d) The coffee dropped more in temperature over the 15 minutes than the tea.

e) It took 1 minute longer for the tea to reach 45°C than it did the coffee.

f) From minute 4 to minute 8, the tea's temperature changed by 23°C.

1)



These children described a line graph before the title and the labels of the axes were removed. Which of their descriptions could have been about this line graph? Under each description, give reasons to explain why you think their description matches or does not match the line graph.

a)

Jasper

My line graph shows the journey of a hot-air balloon. The y-axis is labelled 'Height in Metres'. The balloon was anchored to the ground before it took off at 9:00. It then left the ground and rose into the air gradually. After 6 hours in the air, the hot-air balloon returned to the ground.

b)

Yi Ling

My line graph shows the temperature of a cup of coffee. The y-axis is labelled 'Temperature in °F'. The cup of coffee was made at 8:00 and cooled off gradually over the next few hours until it reached a steady, lower temperature.

c)

Asad

My line graph shows the amount of water in a garden centre's water butt. The y-axis is labelled 'Volume of Water in Litres'. Water was taken out of the butt from 8:00 and used throughout the day to water the plants in the garden centre. The butt was topped up from a hosepipe between 14:00 and 16:00 until the garden centre closed.

2) Draw a fully-labelled line graph, like the example, that could describe the journey of a hot-air balloon. Label the x-axis 'Time' and the y-axis 'Height'. Then, write two different descriptions: one that matches your line graph and one that is incorrect. Challenge a friend to spot which of the descriptions correctly matches the line graph and explain why.