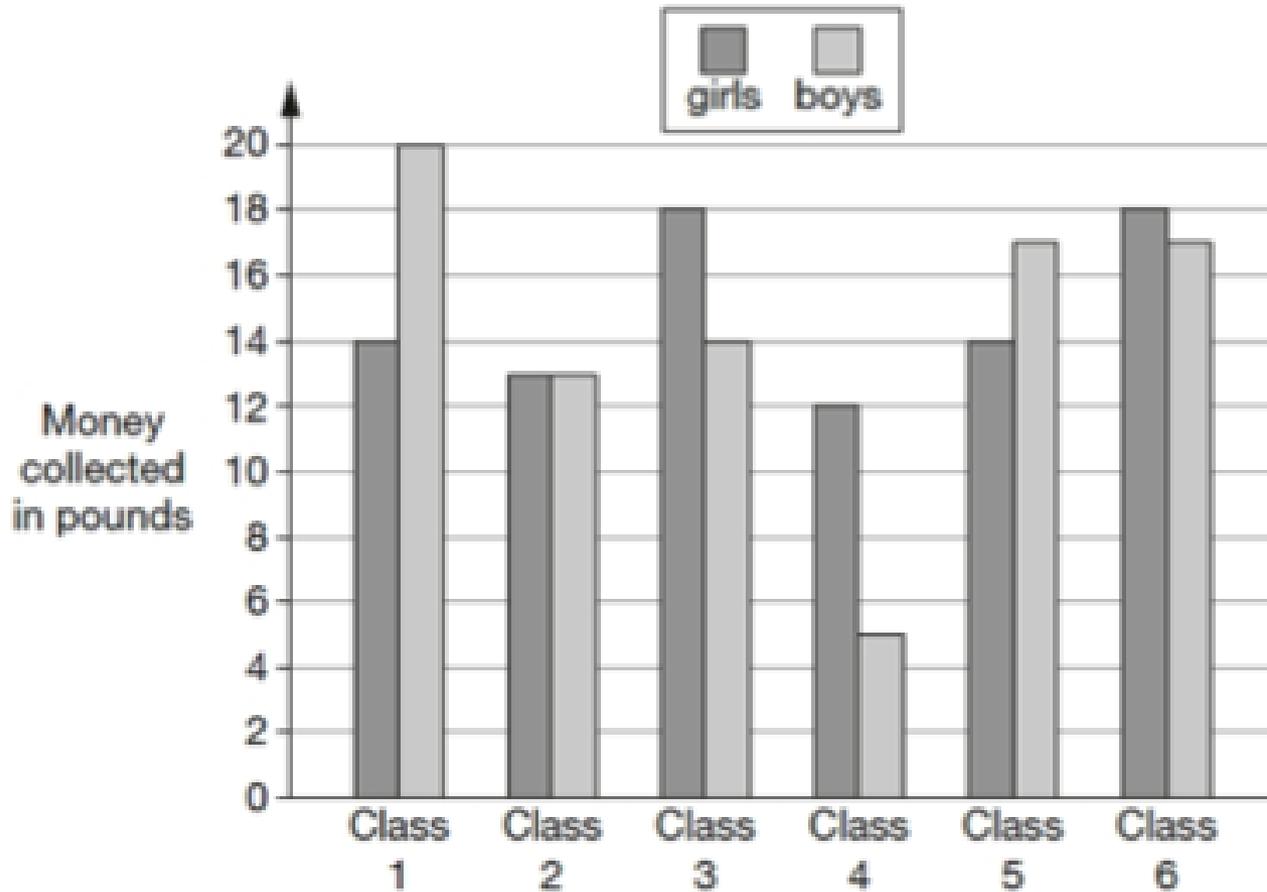


# RECALL



Six classes at Winward Primary School collected some money.

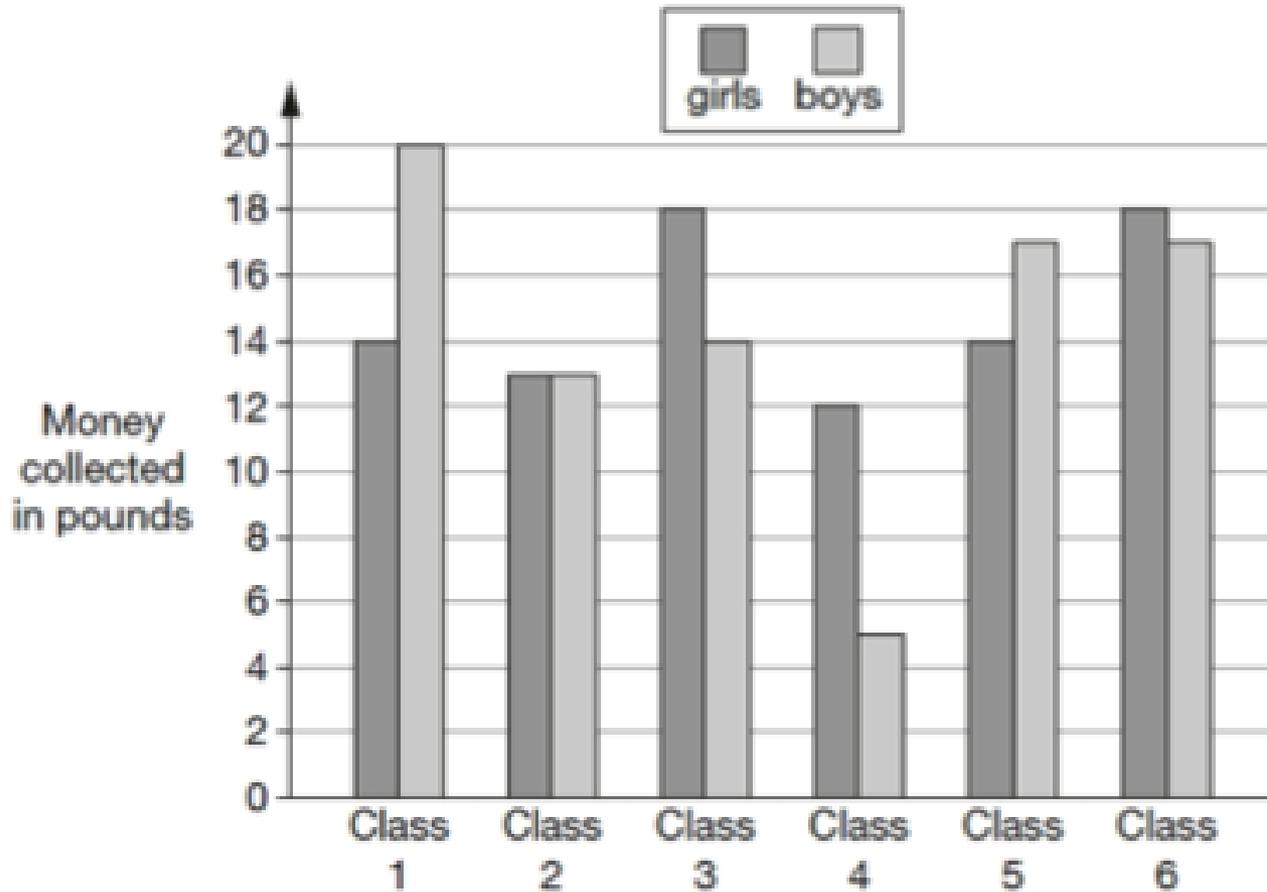
The chart shows how much money the boys and girls collected.

- 1) In class 4, how much more money did the girls collect than the boys?
- 2) How many classes collected more than £30?



Create your own question about this graph

# RECALL



Six classes at Winward Primary School collected some money.

The chart shows how much money the boys and girls collected.

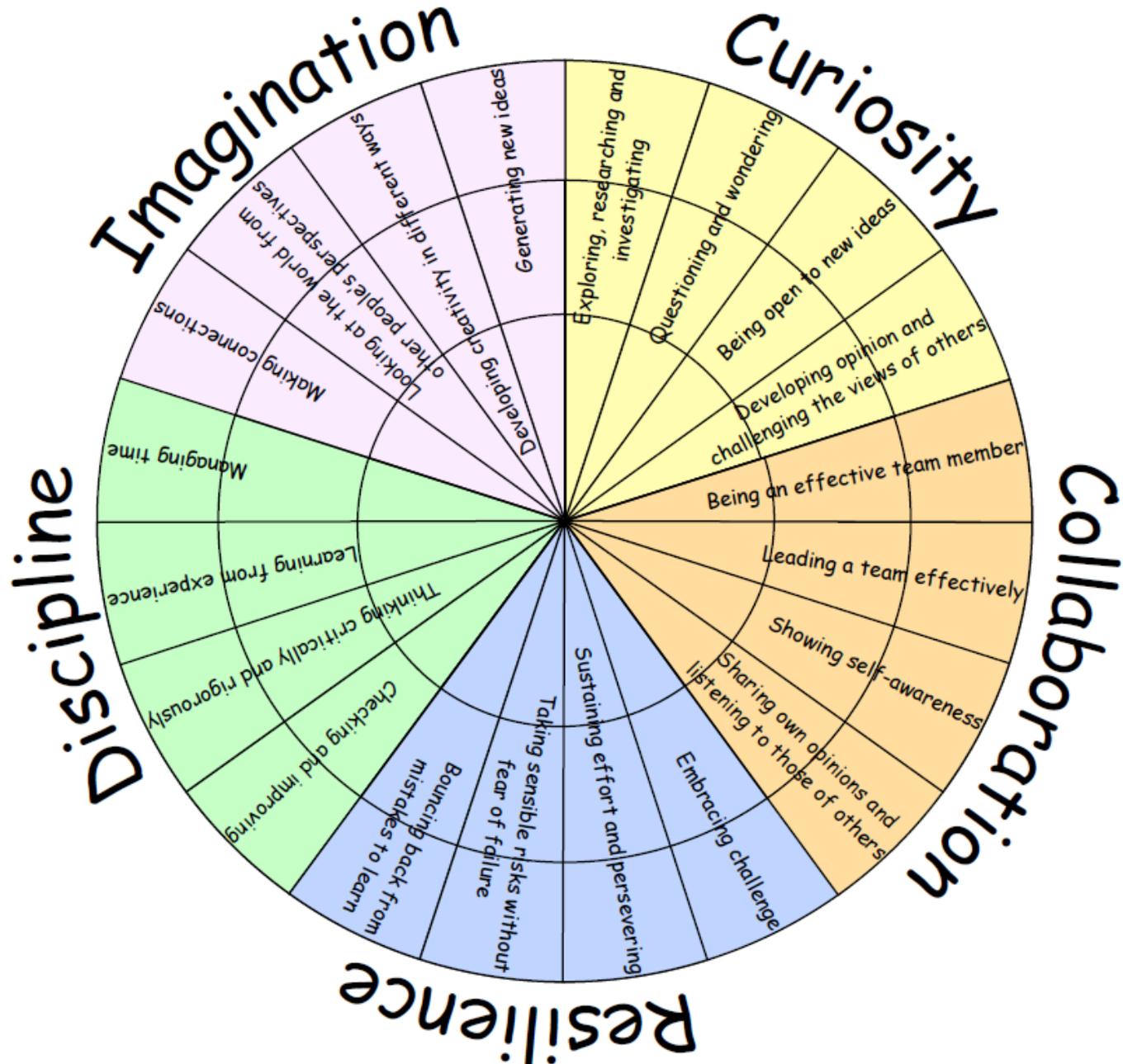
- 1) In class 4, how much more money did the girls collect than the boys? **£7**
- 2) How many classes collected more than £30? **4**



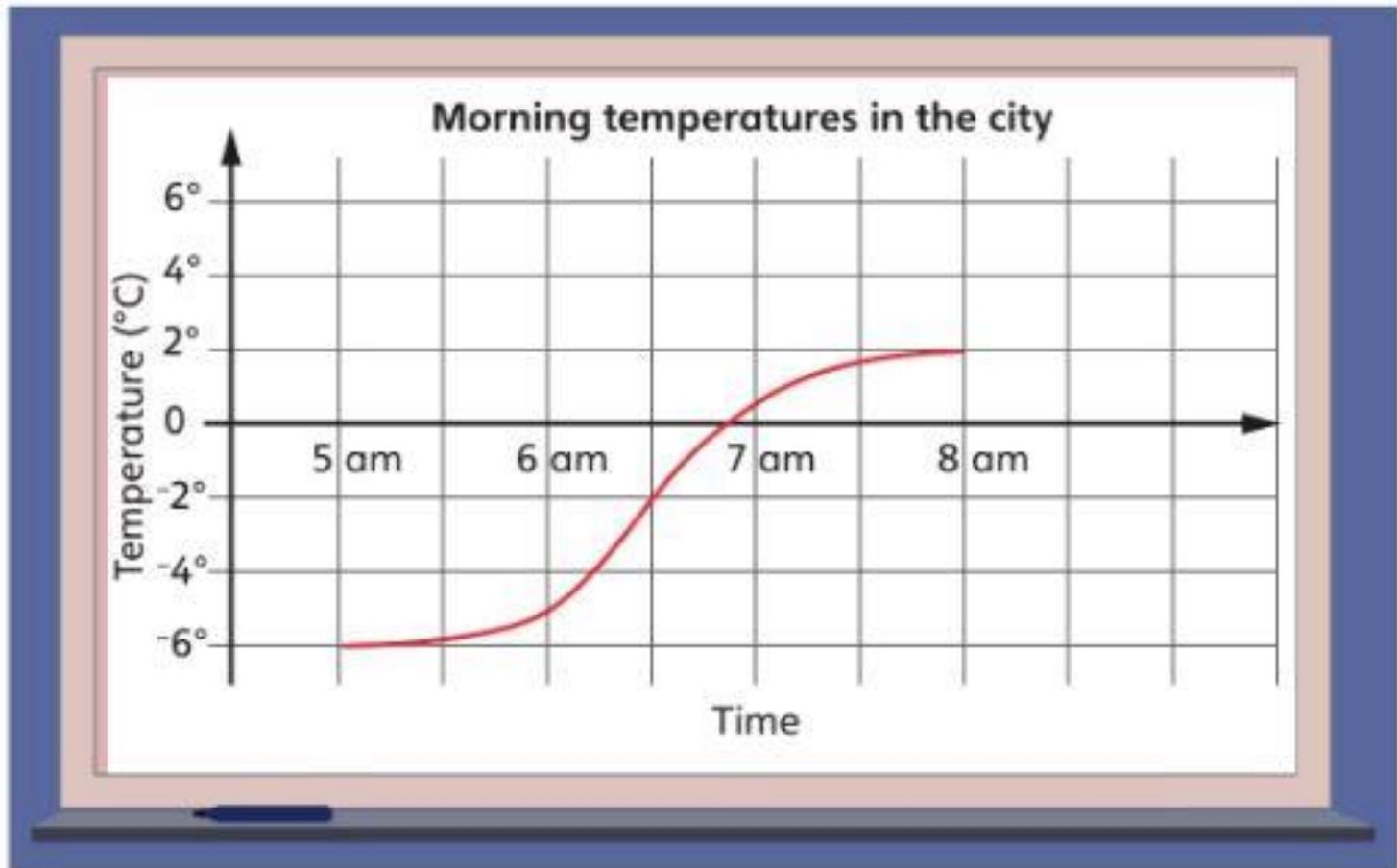
Create your own question about this graph

I CAN SOLVE PROBLEMS USING  
THE DATA FROM LINE GRAPHS  
AND PIE CHARTS  
statistics (32ii)

# LEARNING HABITS?



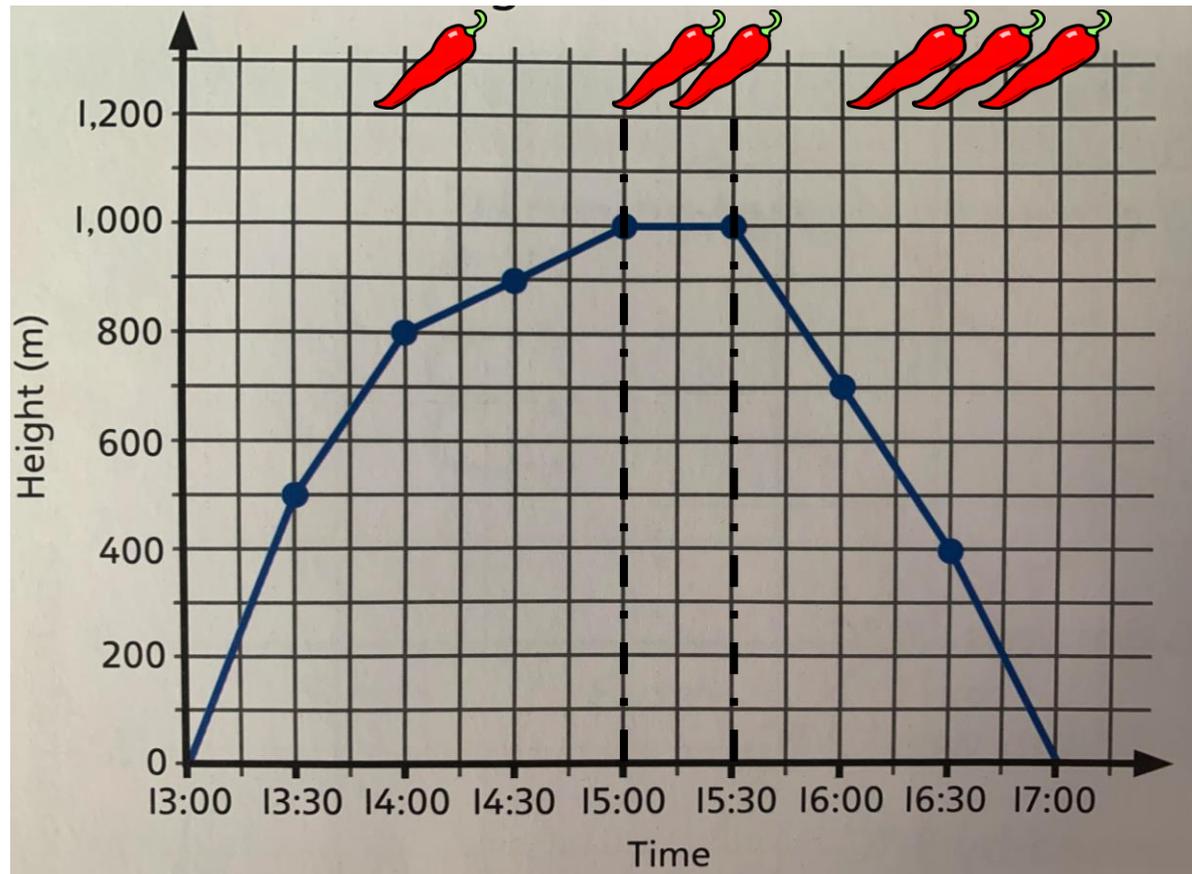
# GUIDED PRACTICE



- 1 a) How much did the temperature increase between 6am and 6:30 am?
- b) Estimate at what time the temperature reached 1°C.

# INTELLIGENT PRACTICE

This graph shows the height at which a balloon floated between 13:00 and 17:00.



Describe what is happening at each set of chillies in the graph.

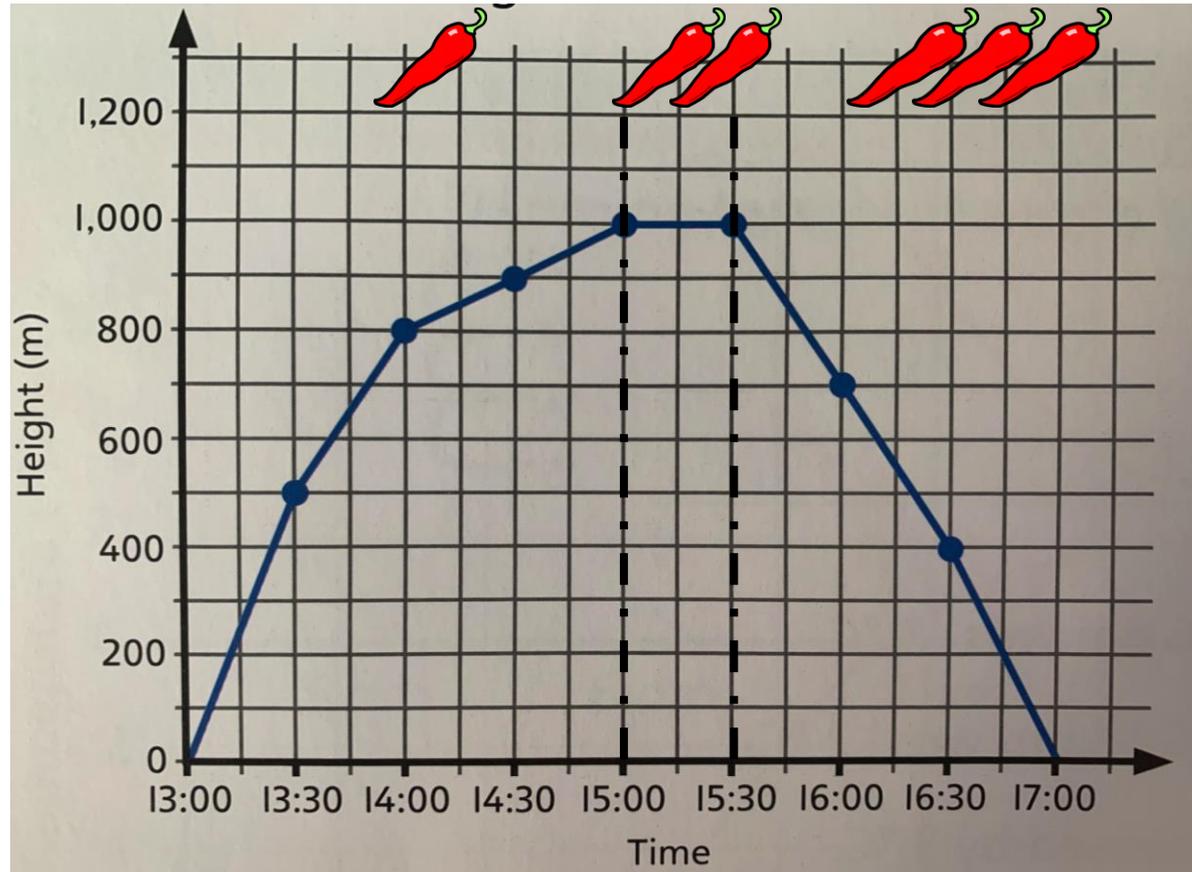
Use the time and height to help form accurate and informative sentences.



How long did the balloon remain above 500 m?

# INTELLIGENT PRACTICE ANSWERS

This graph shows the height at which a balloon floated between 13:00 and 17:00.



Describe what is happening at each set of chillies in the graph.

Use the time and height to help form accurate and informative sentences.

At 13:00, the balloon rose to the height of 1,000m.

The balloon stayed at the the height of 1,000m for 30 minutes between 15:00 and 15:30.

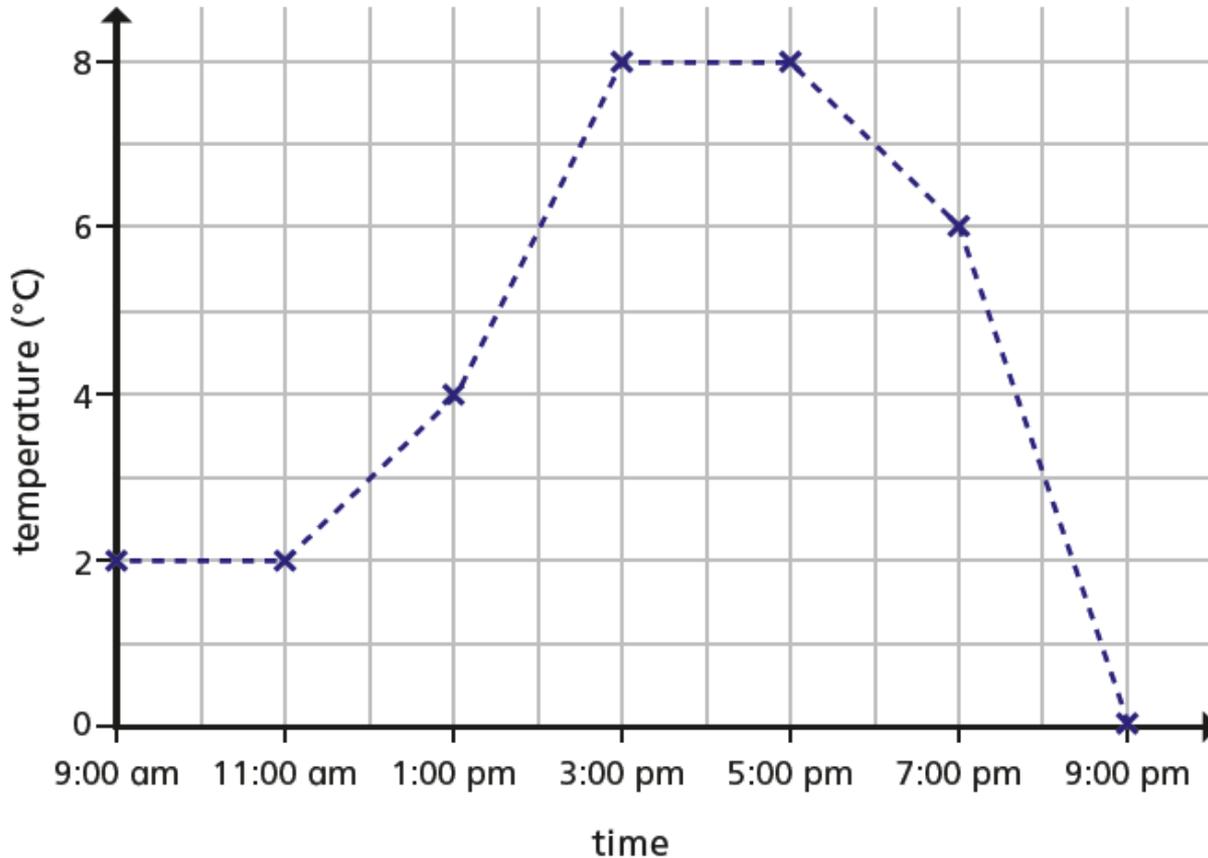
The balloon then fell back to 0m at 17:00. It took 1 hour and 30 minutes.



How long did the balloon remain above 500 m? **2 hours and 50 minutes**

# DIVE DEEPER 1

The graph shows the temperature in Birmingham on one day.



1a) What was the temperature at 1:00 pm?

b) What was the difference in temperature between 11:00 am and 1:00 pm?

c) Between which times was the temperature increasing?

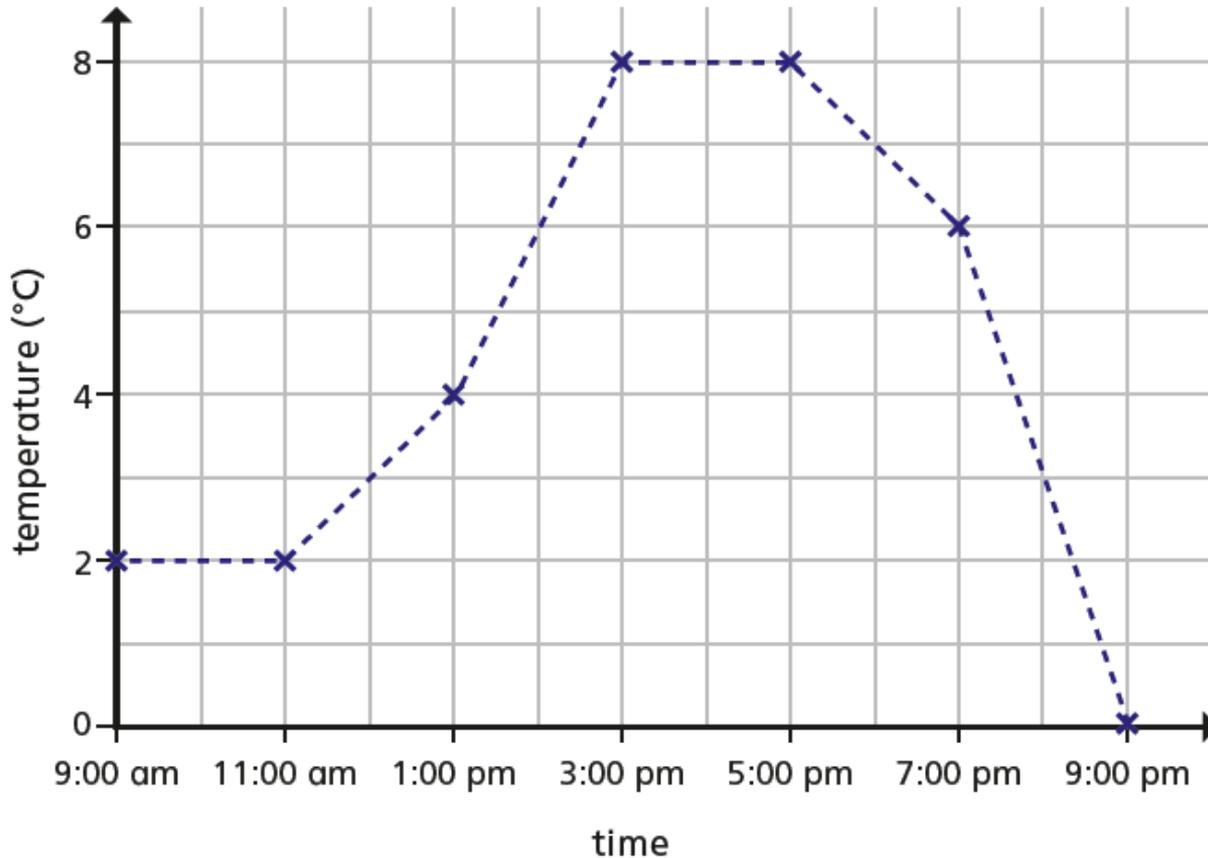
d) How often was the temperature recorded?



Using the idea from the guided practice, tell the story of this graph.

# DIVE DEEPER 1 ANSWERS

The graph shows the temperature in Birmingham on one day.



1a) What was the temperature at 1:00 pm?  
4°C

b) What was the difference in temperature between 11:00 am and 1:00 pm?  
2°C

c) Between which times was the temperature increasing?  
11:00 am and 3:00 pm

d) How often was the temperature recorded?  
Every 2 hours

The temperature stayed at 2°C from 9:00 am till 11:00 am.

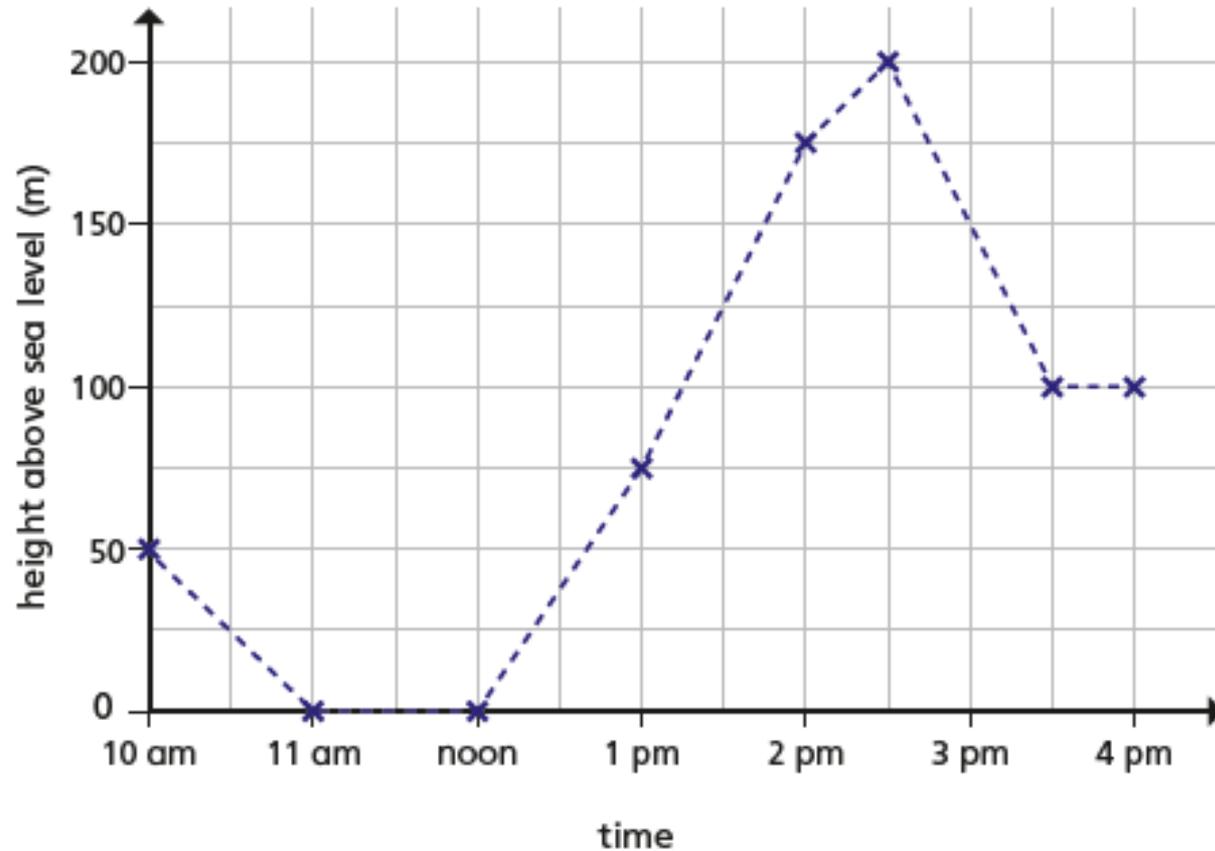
It then rose to 8°C at 3:00 pm where it stayed constant for 2 hours.

The temperature then dropped to 0°C at 9:00 pm.



# DIVE DEEPER 2

The graph shows the height above sea level during Aisha's walk.



1a) What was the height above sea level where Aisha was walking at 2pm?

b) At what time in Aisha's walk was she standing 200m above sea level?

c) Part of the walk was along a beach. Between which times did Aisha walk along the beach?

Explain how you know.

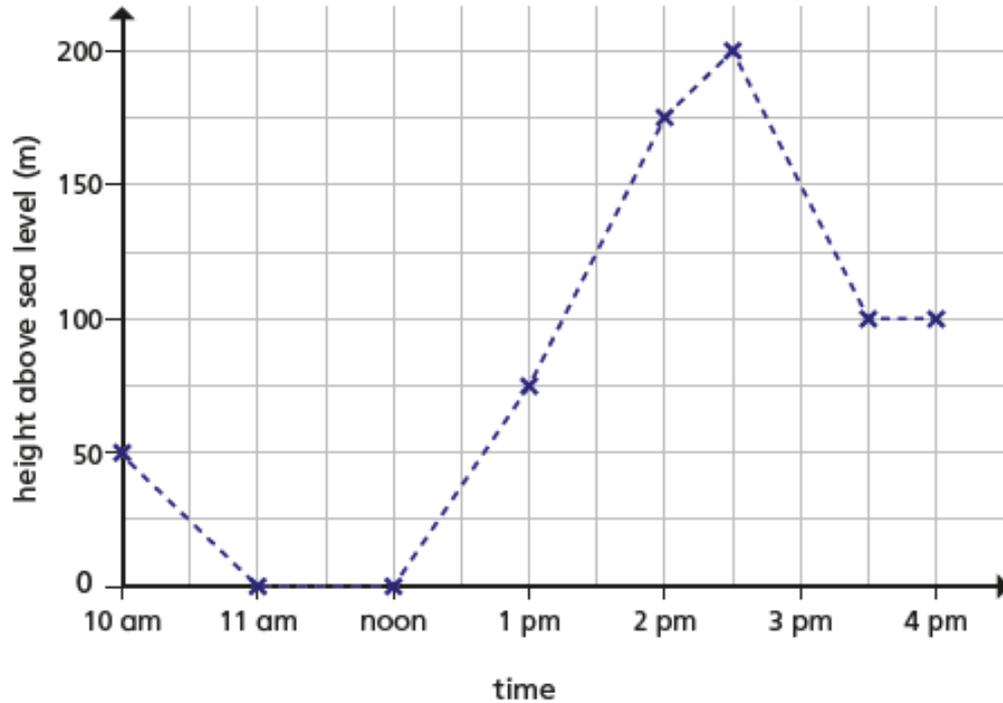
d) Did the walk start and finish in the same place? Explain how you know.



Tell the story of this graph

# DIVE DEEPER 2 ANSWERS

The graph shows the height above sea level during Aisha's walk.



Aisha started her walk at 50m above sea level and walked to the beach.  
She walked along the beach for an hour.  
She then walked for 2 hours and 30 minutes up hill to a height of 200m.  
She then walks downhill for an hour to 100m above sea level.  
She then walks for 30 minutes at this altitude.

1a) What was the height above sea level where Aisha was walking at 2pm? **175m**

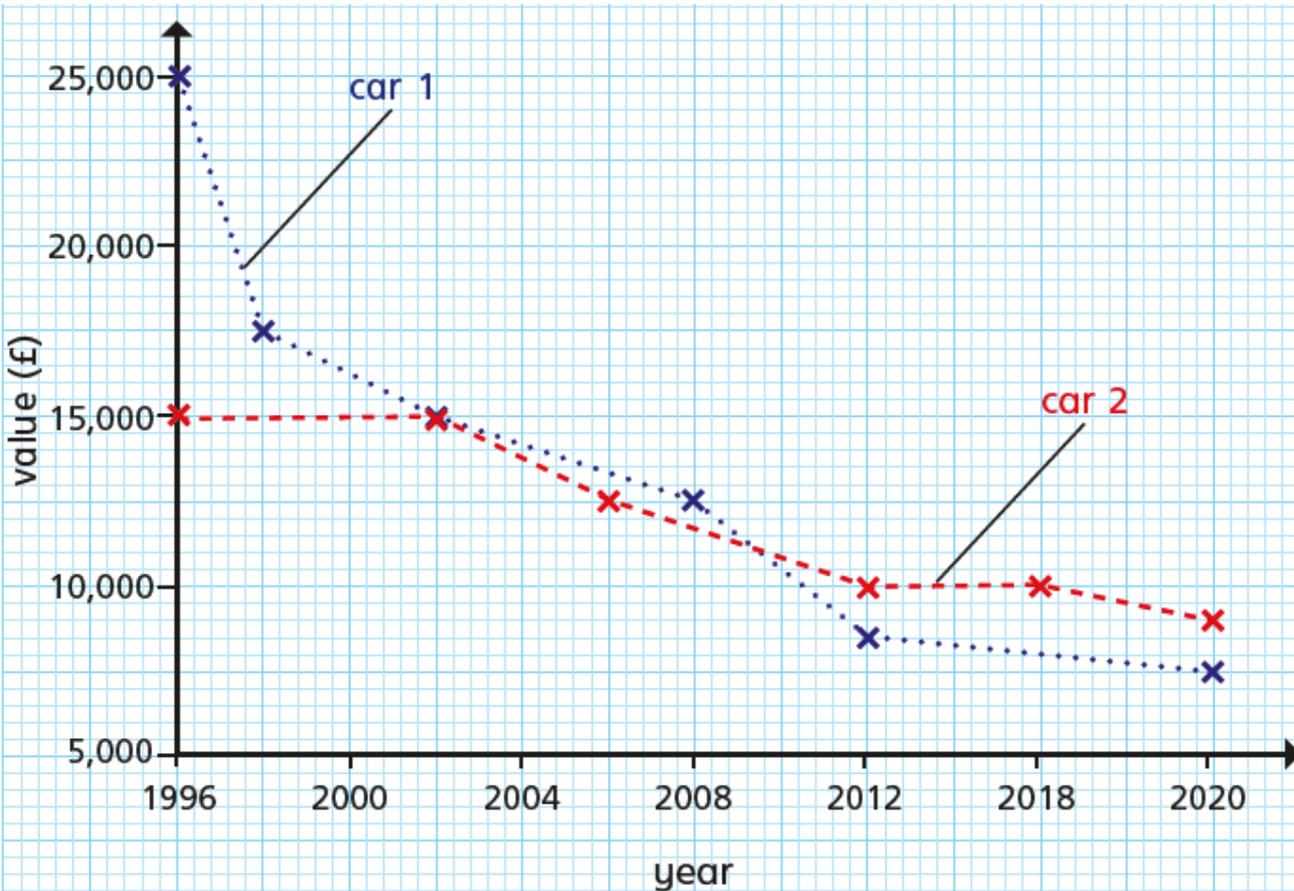
b) At what time in Aisha's walk was she standing 200m above sea level? **2:30pm**

c) Part of the walk was along a beach. Between which times did Aisha walk along the beach? **11am and noon** because the sea meets the beach so they are at the same level.

d) Did the walk start and finish in the same place? **No, because the height above sea level is different.**

# DIVE DEEPER 3

The graph shows the values of two cars over time.



3a) In which year was the recorded value of the cars the same?

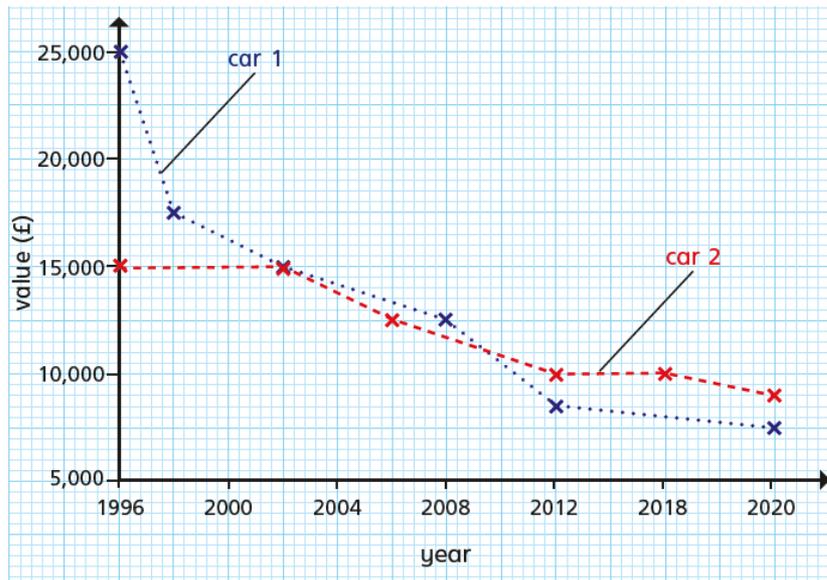
b) In which two years was the difference in the recorded values of the two cars the same?

c) Which car's value decreased the most between 1996 and 2020?

d) For approximately how many years was the value of car 2 greater than the value of car 1?

e) Jack says, "The value of car 2 halved between 1996 and 2012." Do you agree?

# DIVE DEEPER 3 ANSWERS



The graph shows the values of two cars over time.

3a) In which year was the recorded value of the cars the same? **2002**

b) In which two years was the difference in the recorded values of the two cars the same? **2012 and 2020**

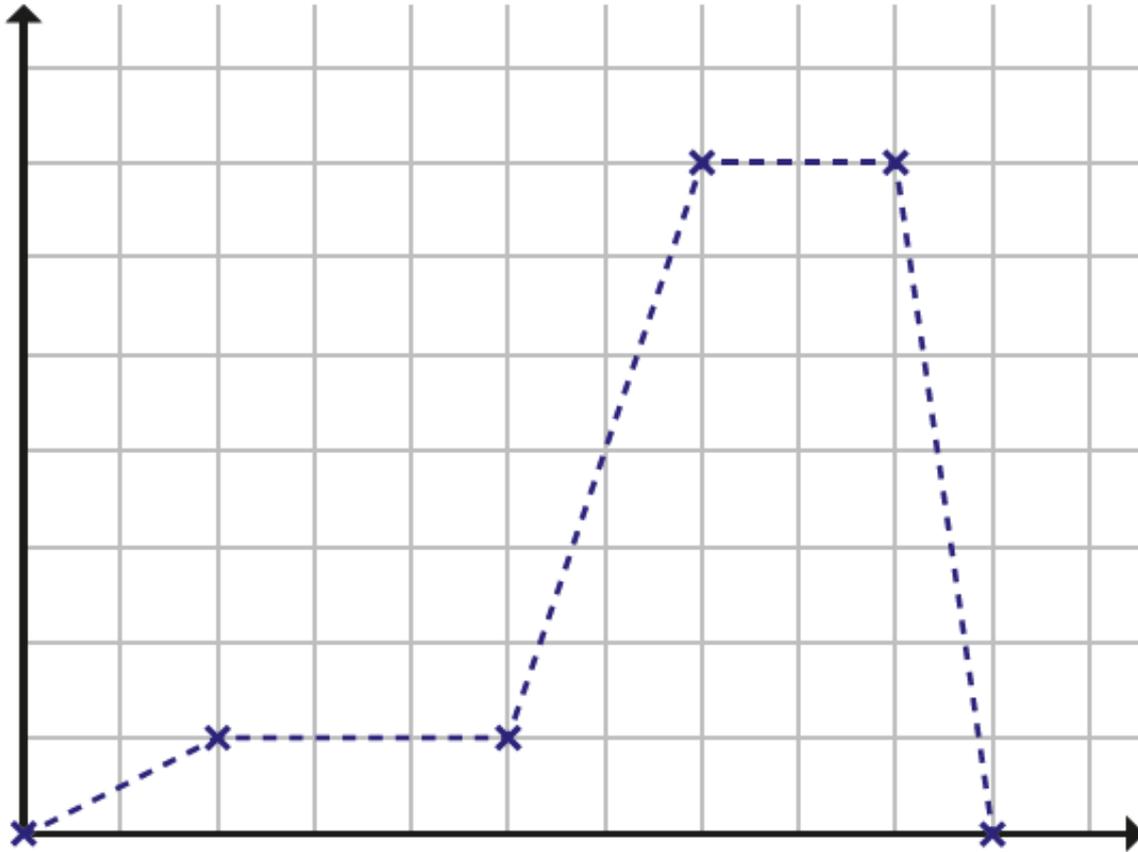
c) Which car's value decreased the most between 1996 and 2020? **Car 1**

d) For approximately how many years was the value of car 2 greater than the value of car 1? **10 years**

e) Jack says, "The value of car 2 halved between 1996 and 2012." Do you agree?  
**No because £10,000 is not half of £15,000. The graph doesn't go to zero.**

# DIVE DEEPER 4

Here is a line graph



4a) What could be happening in the graph?  
Write a story to match it.

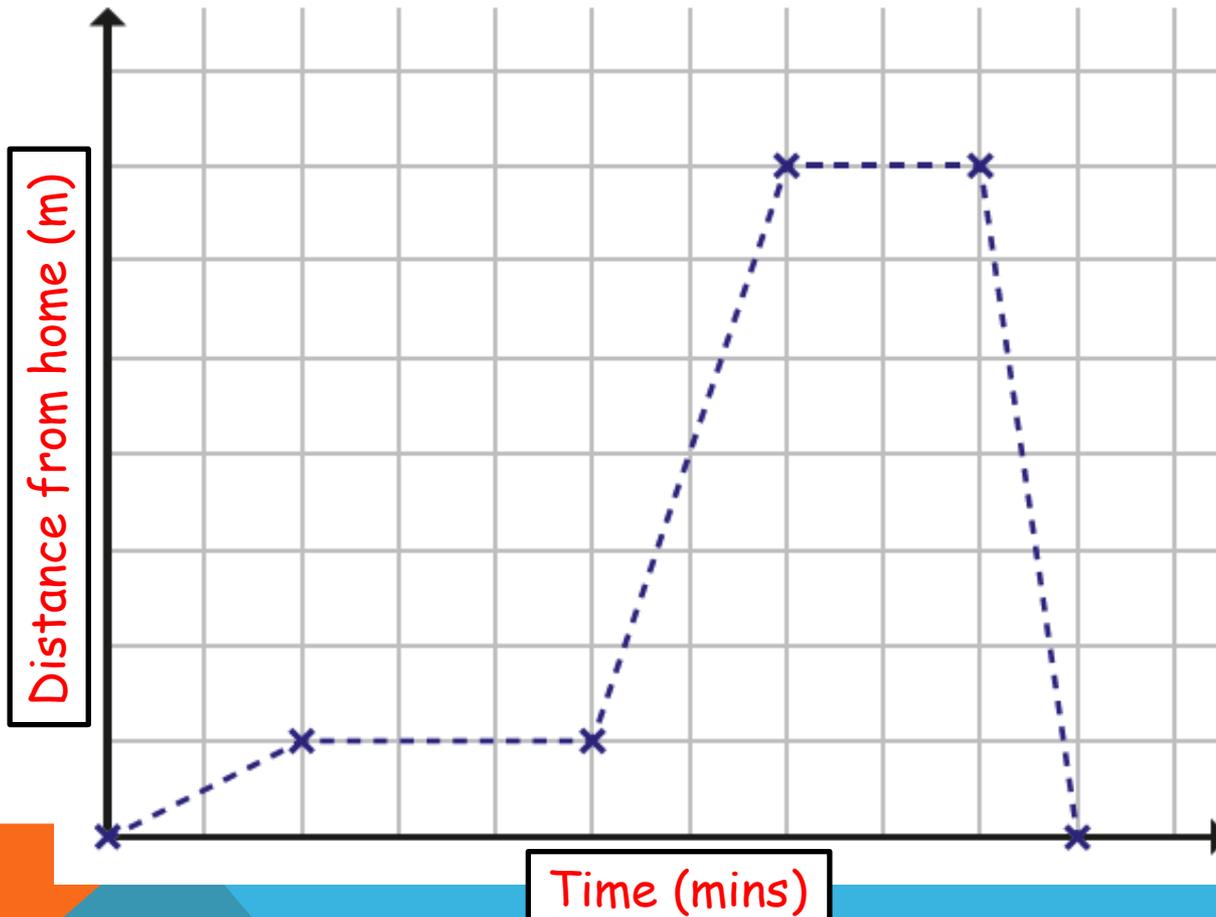
b) What would the x-axis be labelled for your story?

c) What would the y-axis be labelled for your story?

d) Write two questions that you could ask your teacher about your story?

# DIVE DEEPER 4 ANSWERS

Here is a line graph to show Mr Newton's walk to the shop



Mr Newton left his house and stopped for some time.  
He then carried on walking to the shop.  
He spent some time in the shop buying his dinner.  
He then ran home because he was really hungry.

# SELF-ASSESSMENT

- Some will even be able to create a story to match a graph
- Some will be able to tell the story of a graph
- Most will be able answer a range of questions using data
- All will be able read data from a graph