Year 6 Maths

Developing activity
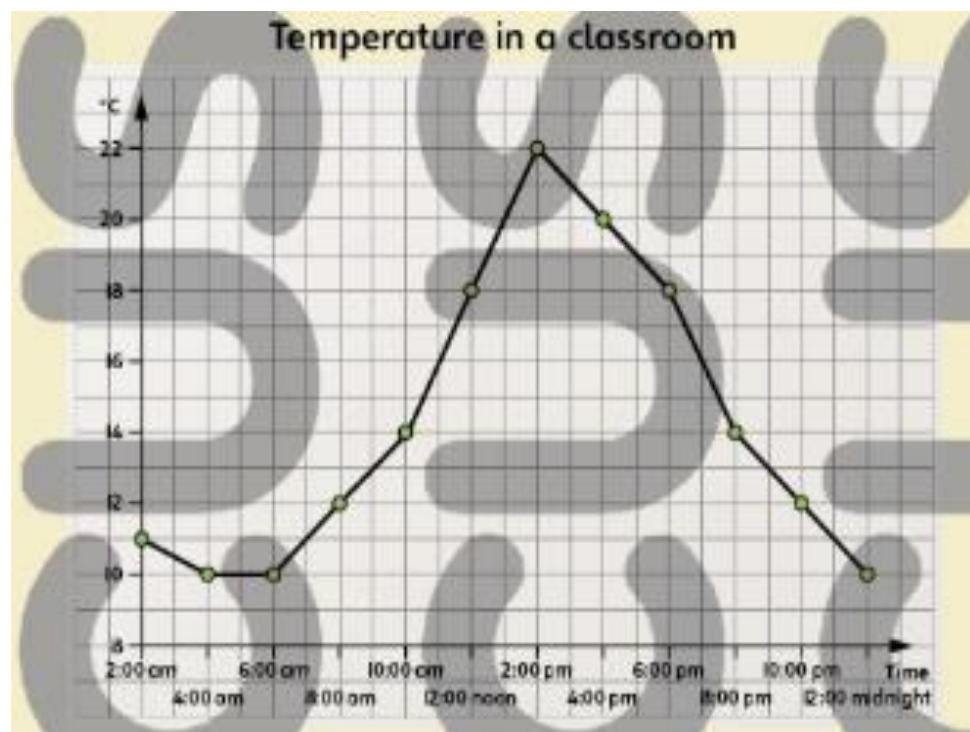
Lesson 3

LO: TBAT interpret information on a line graph.

Success Criteria:

1. Read the graph.
2. To find information start with the x axis (horizontal line).
3. Then go up the y axis (vertical line).

Model

Watch my model video clip on Class dojo.

Temperature in a classroom

Now you try...

At what times is the temperature:

1. 10 °C?   3. 18 °C?   5. 22 °C?
2. 12 °C?   4. 14 °C?   6. 20 °C?

When is the temperature:

7. highest?   8. lowest?   9. half-way between 12 °C and 20 °C?

Canonbury Home Learning

<u>Year 6 Maths</u>

<u>Expected/ Greater depth activity</u>

<u>Lesson 3</u>

<u>LO: TBAT solve problems interpreting data on a line graph.</u>

<u>Task:</u>

You are going apply your knowledge to solve several problems including interpreting data from line graph.

<u>Success Criteria:</u>

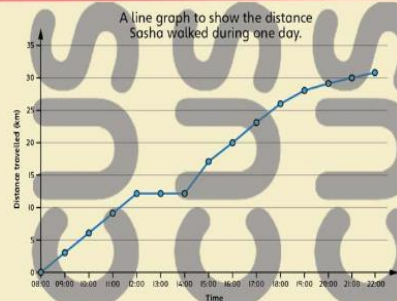|	
1.	**Read the graph.**
2.	**To find information start with the x axis (horizontal line).**
3.	**Then go up the y axis (vertical line).**

<mark>**Recap:**</mark>

Watch my model video clip on Class dojo.

Canonbury Home Learning

Year 6 Maths

Main activity

Complete at least 2 columns, more if you can!

Task 1	Task 2	Task 3	Task 4
Practice	**Arithmetic**	**Problem Solving**	**Reasoning**

Task 1 (Practice)

Look at this graph and answer the questions.

A line graph to show the distance Sasha walked during one day.

How far had Sasha walked by:
1. 12 pm?
2. 4 pm?
3. 10 pm?

At what time did she reach:
4. 5 km?
5. 20 km?
6. 25 km?
7. At what time did she stop for a rest and how long did she stop for?
8. How long did it take her to walk 10 km?
9. Between which two times was she walking the fastest?
10. Between which two times was she walking the slowest but still moving?

Task 2 (Arithmetic)

22. $0.8 \times 4 =$

23. $20\% = \dfrac{?}{20}$

24. $\dfrac{7}{8}$ of $64 =$

25. $1\dfrac{1}{4} \times 4 =$

26. $42\overline{)9875} =$
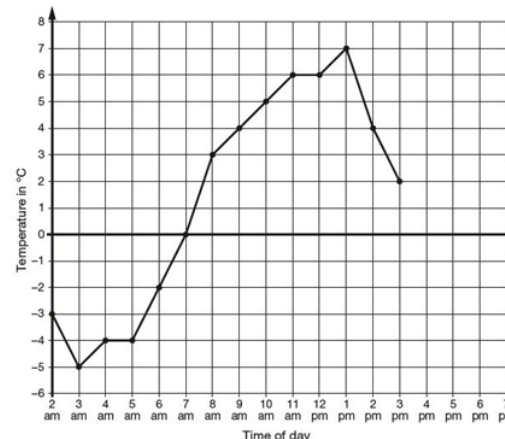
27. $\dfrac{3}{4} - \dfrac{1}{6} =$

28. $\dfrac{1}{3} \div 3 =$
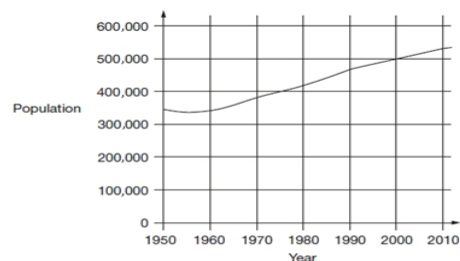
Problem Solving

Task 1

This graph shows the temperature in °C from 2 am to 3 pm on a cold day.

How many degrees **warmer** was it at 3 pm than at 3 am?

At 6 pm the temperature was 4 degrees lower than at 3 pm.

What was the temperature at 6 pm?

Task 2

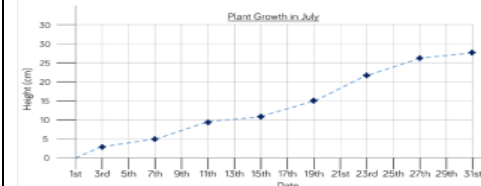This chart shows the population of Cornwall from 1950 to 2010.

Look at the chart.

In which year did the population first reach 400,000?

How much did the population increase from 1950 to 2000?

What was the population of Cornwall in 2010?

Reasoning

Task 1

Eva has created a graph to track the growth of a plant in her house.

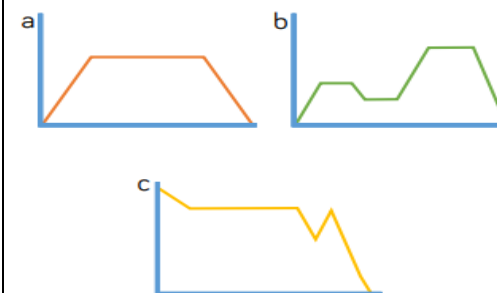Eva recorded the following facts about the graph.
a) On the 9th of July the plant was about 9 cm tall.
b) Between the 11th and 19th July the plant grew about 5 cm.
c) At the end of the month the plant was twice as tall as it had been on the 13th.
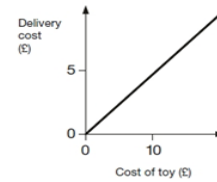Can you spot and correct Eva's mistakes?

Task 2

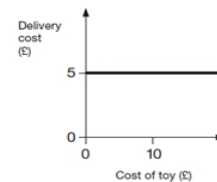Write a story and 3 questions for each of the 3 graphs below.

Task 3

Two companies sell toys online. They charge to deliver.

Describe the delivery cost of the second company.
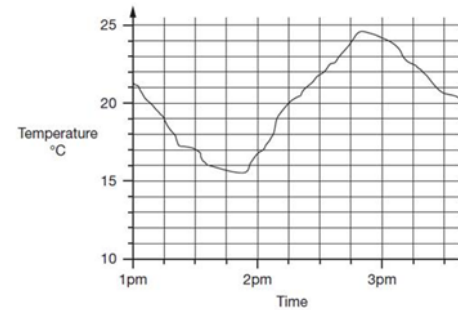
The first company is done for you.

Delivery cost (£)

Cost of toy (£)

The more a toy costs, the more _____

the delivery costs. _____

Delivery cost (£)

Cost of toy (£)

_____
_____
_____
_____
_____
_____

Task 4

This graph shows how the temperature changed in Liam's room one afternoon.

Temperature °C

Time

Estimate the temperature at 3:15pm.

Estimate the time when the temperature was highest.

How much did the temperature change from 2pm to 2:30pm? Give your answer to the nearest degree.

Task 3

This table shows the distance a lorry travelled during the day.

Time	Distance in miles
7.00 a.m.	10
8.00 a.m.	28
9.00 a.m.	42
10.00 a.m.	58
11.00 a.m.	70
12.00 a.m.	95
1.00 p.m.	95
2.00 p.m.	118

Create a line graph to represent the information, where the divisions along the x-axis are every two hours.

Create a second line graph where the divisions along the x-axis are every hour.

Compare your graphs. Which graph is more accurate?

Would a graph with divisions at each half hour be even more accurate?