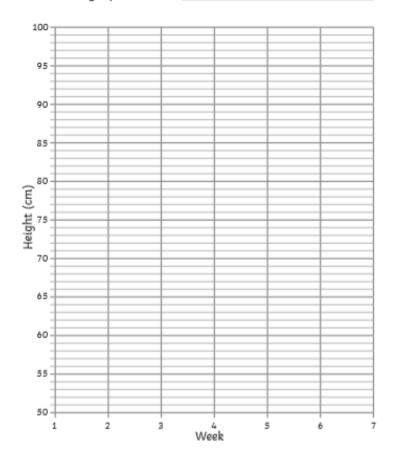
Class 5 measures the height of a sunflower over seven weeks. Here is the table of data that shows their results:



Week	1	2	3	4	5	6	7
Height (cm)	52	59	66	72	78	88	93

1) Draw a line graph to represent the data.

A line graph to show \_\_\_\_\_



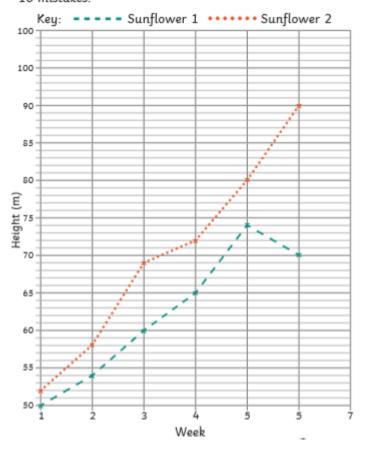
2) Class 6 also measures their sunflower's height. Here is the table that shows their results:

Week	1	2	3	4	5	6	7
Height (cm)	55	60	64	70	74	80	85

Represent this second set of data on your line graph. What do you need to include when showing two sets of data on one line graph?

Week	1	2	3	4	5	6
Sunflower 1 - Height (cm)	52	57	69	73	81	90
Sunflower 2 - Height (cm)	50	54	60	65	75	80

Rami draws a graph of the data. However, he has made 10 mistakes.



- Circle all 10 mistakes. Then, in your book, explain how you know each mistake is wrong.
- Explain what advice you would give Rami for drawing line graphs.





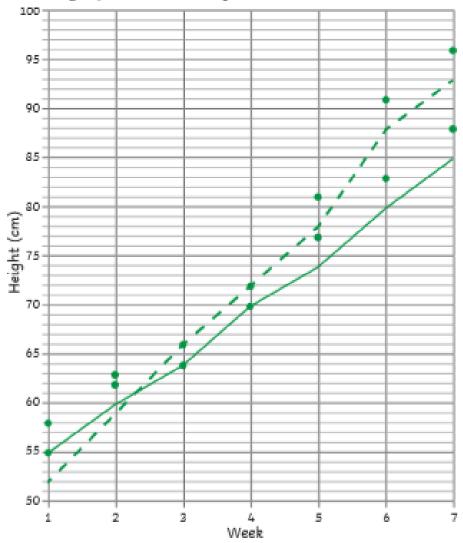
Daisy's Sunflower
Marlon's Sunflower
Rami's Sunflower



- In week 1, Marlon's sunflower was 2cm shorter than Daisy's sunflower.
- 2) In week 2, there was a 6cm height difference between Marlon's and Rami's sunflowers. Rami's sunflower was taller than Marlon's.
- In week 3, Daisy's sunflower was taller than Marlon's but shorter than Rami's. Its height was an odd number of cm.
- 4) By week 4, Daisy's sunflower had grown 18cm since week 1. However, it was still 1cm shorter than Marlon's sunflower.
- In week 5, Rami's sunflower was 1cm taller than Marlon's.
- In week 6, Daisy's sunflower was 1cm taller than Rami's.
- By week 7, Rami's sunflower was the tallest, towering 5cm over Marlon's sunflower and 2cm over Daisy's.
- 8) By the end of the investigation, Rami's sunflower had grown the tallest. It had grown 40cm from its starting height.

## **ANSWERS**

1) A line graph to show the growth of class 5's and class 6's sunflowers



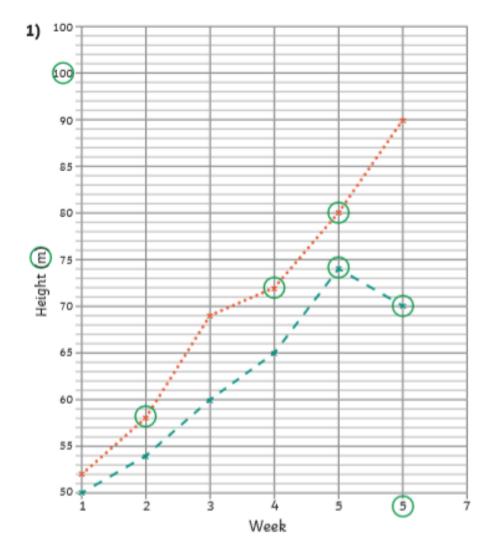
Key:

Class 6 Sunflower

– Class 5 Sunflower

2) A key / legend.

Check that plots are plotted correctly on the line graph, and the sets of data are labelled using a key/legend.



2) Answers will vary. Look for understanding that Rami should be more careful when labelling the numbers on the axes and writing keys and labels. He should check that he has plotted the numbers on the graph at the correct points.

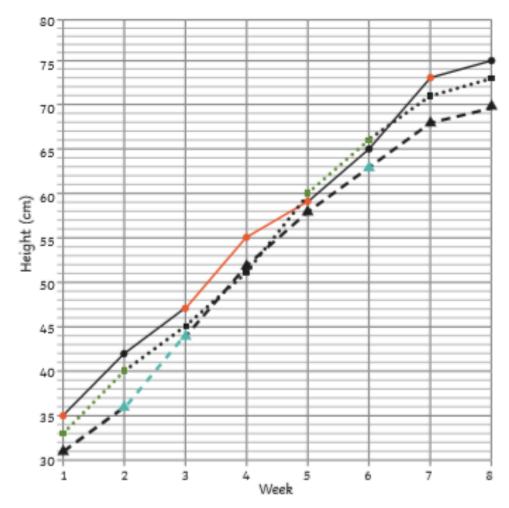
## Key:

- → Height of Sunflower I
- ····· Height of Sunflower 2



- Rami has mixed up the labels in the key. The dashed line should be labelled 'Height of Sunflower 2'.
- The dotted line in the key should be labelled 'Height of Sunflower 1'.
- He has mislabelled the numbers on the x-axis. It should say 5, 6, 7.
- He has mislabelled the numbers on the y-axis. It should say 90, 100, 110.
- The label on the y-axis should say height (cm), not height (m).
- In Week 2, the height of sunflower I should be plotted at 57cm, but he has plotted it at 58cm.
- In Week 4, the height of sunflower I should be plotted at 73cm, but he has plotted it at 72cm.
- In Week 5, the height of sunflower 1 should be plotted at 81cm, but he has plotted it at 80cm.
- In Week 5, the height of sunflower 2 should be plotted at 75cm, but he has plotted it at 74cm.
- In Week 6, the height of sunflower 2 should be plotted at 80cm, but he has plotted it at 70cm.





Week	Daisy's Sunflower	Marlon's Sunflower	Rami's Sunflower
1	33	31	35
2	40	36	42
3	45	44	47
4	51	52	55
5	60	28	59
6	66	63	65
7	71	68	73
8	73	70	75