Homework/Extension
Step 3: Use Line Graphs to Solve Problems

National Curriculum Objectives:

Mathematics Year 6: (6S1) Interpret and construct pie charts and line graphs and use these to solve problems

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Interpreting information from a line graph using graphs with up to 2 sets of data and increments of 2 and 10 on the y axis.
Expected Interpreting information from a line graph using graphs with up to 3 sets of data and increments of 2 and 10 on the y axis, with some sub-divisions between increments.
Greater Depth Interpreting information from a line graph using graphs with up to 3 sets of data, in increments of multiples of 2 and 10 on the y axis, using sub-divisions between increments.

Questions 2, 5 and 8 (Varied Fluency)
Developing Comparing sets of data using graphs with up to 2 sets of data and increments of 2 and 10 on the y axis.
Expected Comparing sets of data using graphs with up to 3 sets of data and increments of 2 and 10 on the y axis, with some sub-divisions between increments.
Greater Depth Comparing sets of data using graphs with up to 3 sets of data, in increments of multiples of 2 and 10 on the y axis, using sub-divisions between increments.

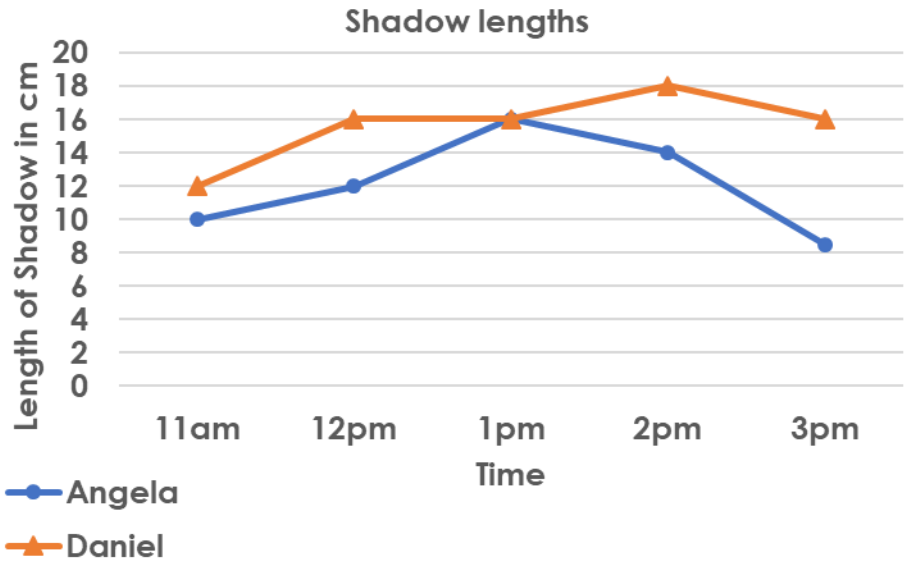
Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Interpret information and explain reasons for the results using graphs with up to 2 sets of data and increments of 2 and 10 on the y axis.
Expected Interpret information and explain reasons for the results using graphs with up to 3 sets of data and increments of 2 and 10 on the y axis, with some sub-divisions between increments.
Greater Depth Interpret information and explain reasons for the results using graphs with up to 3 sets of data, in increments of multiples of 2 and 10 on the y axis, using sub-divisions between increments.

More Year 6 Statistics resources.

Did you like this resource? Don't forget to review it on our website.

Use Line Graphs to Solve Problems

1.



A. What time were both shadows the same length?

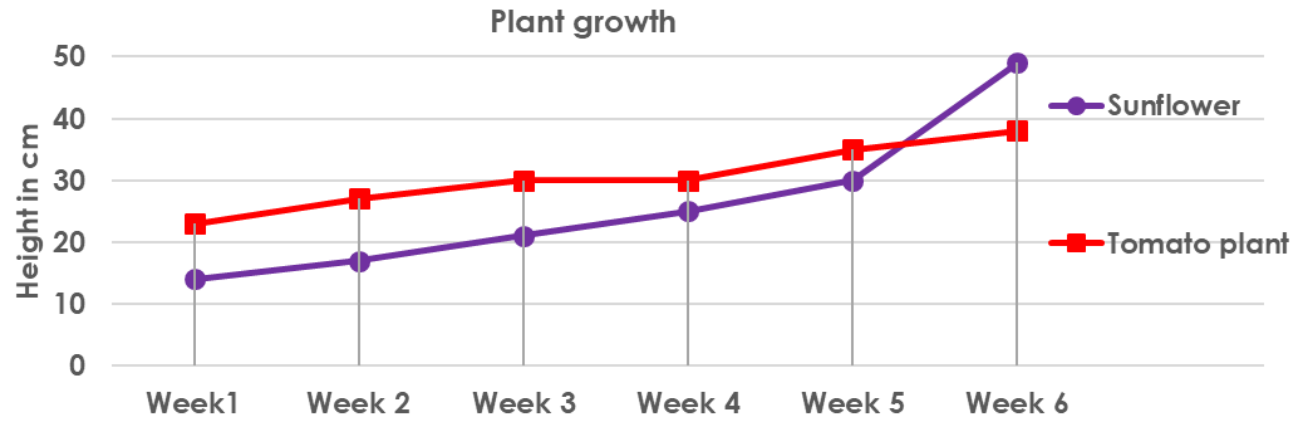
B. Which was longest - Angela's shadow length at 3pm or Daniel's shadow length at 11am?

C. Who was the tallest person?

D

VF
HW/Ext

2.



A. Which plant grew the tallest?

B. Which plant stopped growing for a week?

C. Which plant grew the most between week 1 and week 6?

D

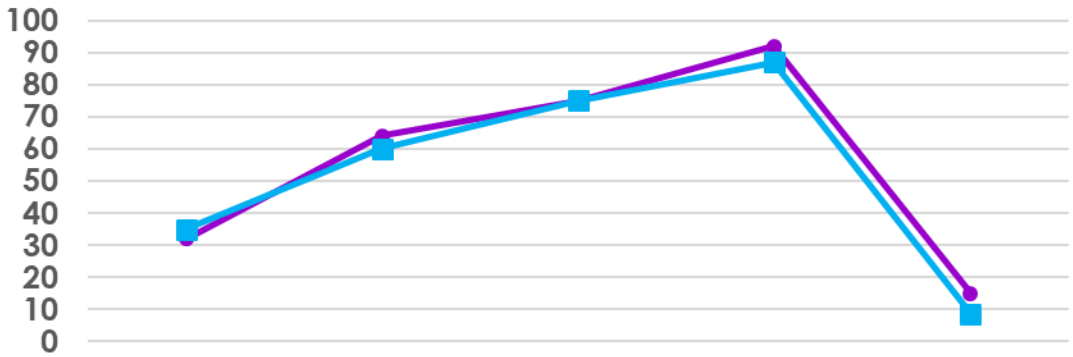
VF
HW/Ext

3. What could this line graph be showing? Explain your choice.

A. The percentage of people living in different types of houses.

B. The weight of four different animals.

C. Time taken to run stages of a race.

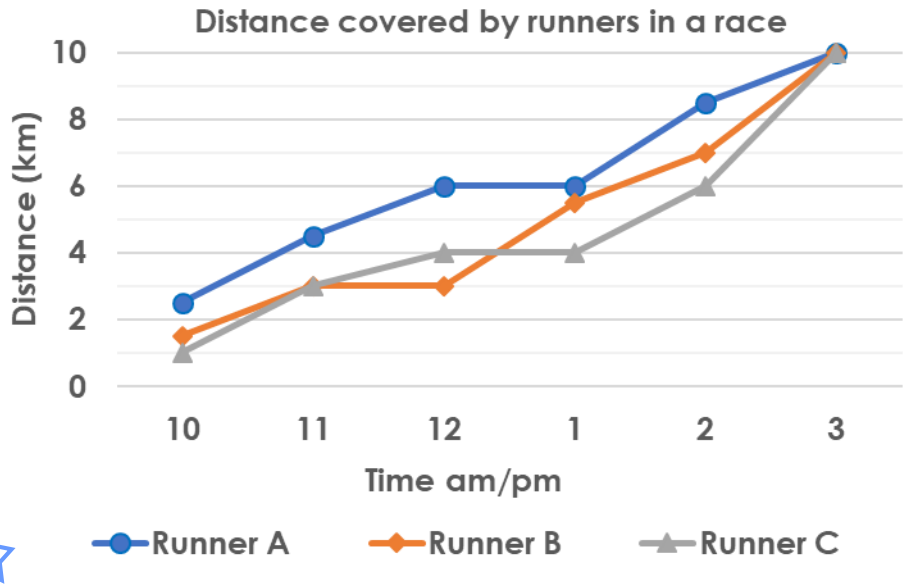


D

RPS
HW/Ext

Use Line Graphs to Solve Problems

4.



A. What distance did runner C cover before and after their rest?

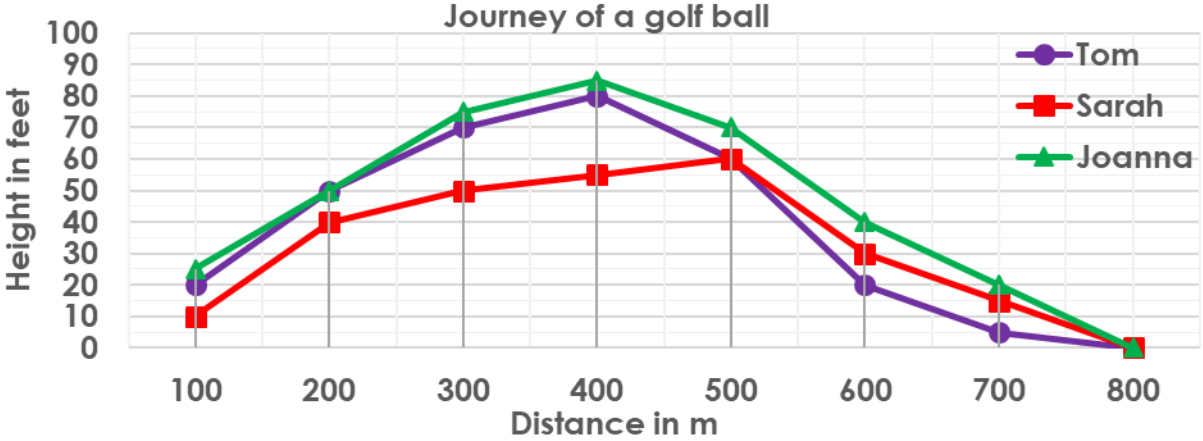
B. What time did runner A have their rest?

C. Which runner had reached the furthest in the quickest time?

E

VF
HW/Ext

5.



A. Between what two distances was Sarah's golf ball higher than 50 feet?

B. How far was Joanna's golf ball off the ground at 700m?

C. Whose ball reached the highest point when it had travelled half its distance?

E

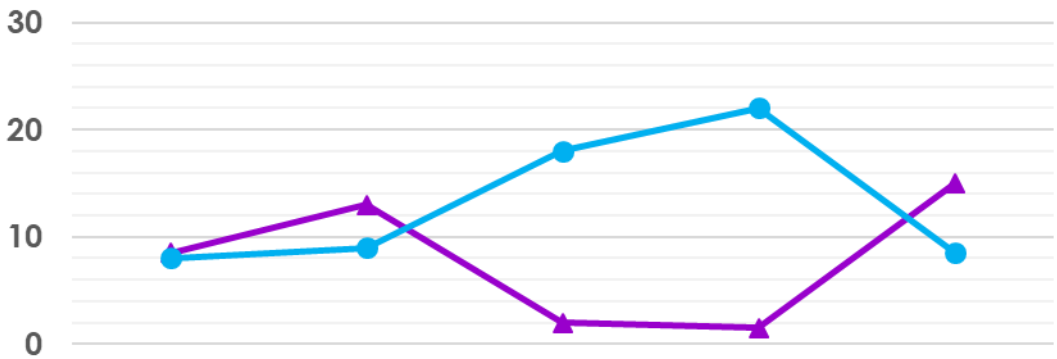
VF
HW/Ext

6. What could this line graph be showing? Explain your choice.

A. Children's favourite flavoured crisps.

B. Number of visitors to different attractions each month.

C. The percentage of pupils who walked to school today.

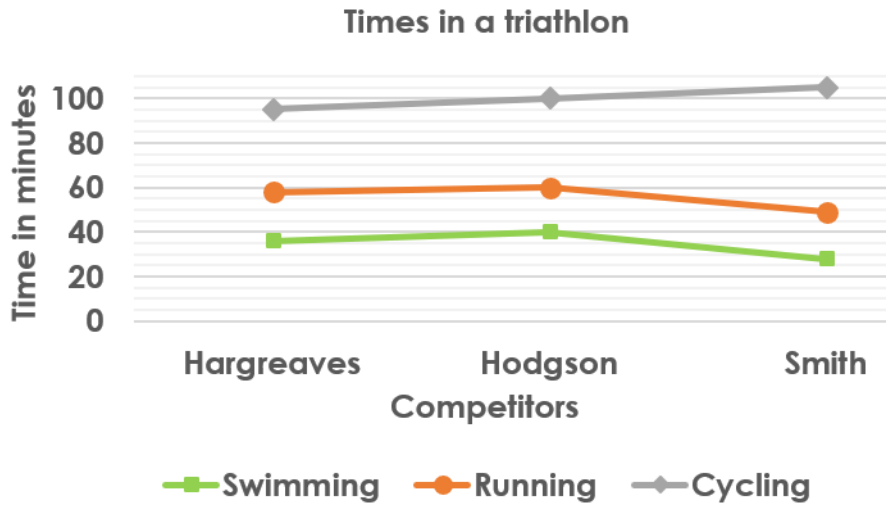


E

RPS
HW/Ext

Use Line Graphs to Solve Problems

7.



A. Who cycled the fastest?

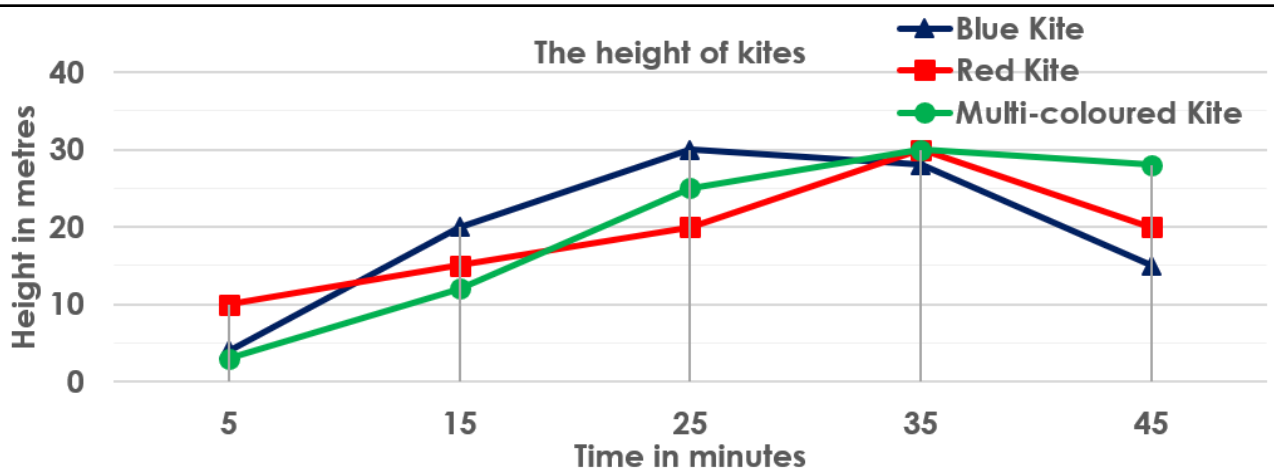
B. Who was quickest in two out of three events?

C. Who was the slowest swimmer?

GD

VF
HW/Ext

8.



A. When was the red kite higher than the rest?

B. How much did the blue kite drop between 25 and 45 minutes?

C. Which kite was the lowest after a third of the total time measured?

GD

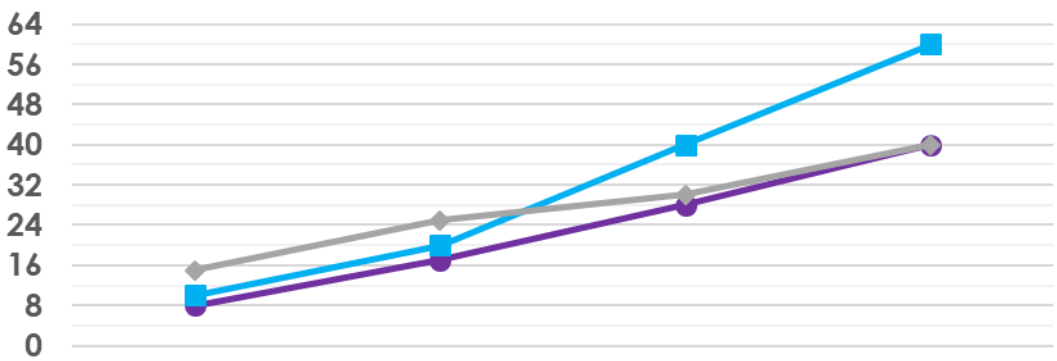
VF
HW/Ext

9. What could this line graph be showing? Explain your choice.

A. The time taken by four different runners.

B. The favourite colours of three classes.

C. The growth of three different trees over time.



GD

RPS
HW/Ext

Homework/Extension
Use Line Graphs to Solve Problems

Developing

1. A. 1pm; B. Daniel's shadow; C. Daniel
2. A. Sunflower; B. Tomato plant; C. Sunflower.
3. C because option A and B could both be presented as a bar chart as they are not showing something changing over a period of time.

Expected

4. A. 3km before; 6 km after; B. 12pm; C. Runner A
5. A. between 400m and 500m; B. 20 feet; C. Joanna's ball.
6. B because option A and C could both be presented as a bar chart as they are not showing something changing over a period of time.

Greater Depth

7. A. Hargreaves; B. Smith; C. Hodgson
8. A. 5 minutes; B. 15 metres; C. Multi-coloured kite.
9. C because option A has four different series and B would be presented as a bar chart as it is not showing something that changes over a period of time.