

Option A Answers (easier)

Task 1 (f) After 55 seconds the something had travelled 125 metres.

Task 2 No answer required just understanding the idea of how graphs tell stories.

Task 3

1	A
2	D
3	B
4	C

Task 4

<u>Graph</u>	<u>Object</u>
1	Car journey
2	Toddler
3	Coach
4	Man cycling
5	Train
6	Motorbike
7	Man drives
8	Bus
9	Girl cycles

Task 5 EXAMPLE ANSWER. WAS YOURS SIMILAR?

- A. For 5 seconds Mr. Whiting watched as the long-legged spider scurried 3 metres towards the underside of the waste bin. For 3 seconds the spider stood in darkness thinking he was safe. Then suddenly, Mr. Whiting lifted the bin and the spider shot like a bullet across the room and out of the kitchen - an amazing 9 metres in 4 seconds. Then the spider froze for 2 seconds. Mr. Whiting's dog Teddy suddenly appeared and 'gulp!' the 8 legged fiend had gone!!

Option B Answers (harder)

Task 1 (f) After 55 seconds the something had travelled 125 metres.

Task 2 No answer required just understanding the idea of how graphs tell stories.

Task 3

SOLUTIONS

graph	description
A	5
B	10
C	4
D	2
E	6
F	3
G	1
H	8
I	7
J	9

Task 4

<u>Graph</u>	<u>Object</u>
1	Car journey
2	Toddler
3	Coach
4	Man cycling
5	Train
6	Motorbike
7	Man drives
8	Bus
9	Girl cycles

Task 5

A	4
B	5
C	3
D	2
E	1
F	6

Task 6

EXAMPLE ANSWER. WAS YOURS SIMILAR?

- A. For 5 seconds Mr. Whiting watched as the long-legged spider scurried 3 metres towards the underside of the waste bin. For 3 seconds the spider stood in darkness thinking he was safe. Then suddenly, Mr. Whiting lifted the bin and the spider shot like a bullet across the room and out of the kitchen - an amazing 9 metres in 4 seconds. Then the spider froze for 2 seconds. Mr. Whiting's dog Teddy suddenly appeared and 'gulp!' the 8 legged fiend had gone!!

Task 7

Your story should include a sensible means of travelling at a constant speed that covers 12 miles in 2 hours. As the gradient is not steep this suggests that Mr. W is travelling relatively slow. It is unlikely (but not impossible) for him to be in a car or a form of transport that travels faster as this mean that it would have to travel VERY, VERY slowly. A car travelling at 6 mph would be pulled over by the police for driving TOO SLOW and causing a hazard to others and Mr. W might get arrested!!! Mr. W being a cyclist or runner is a more likely option at this stage. However, as long as your story makes sense in its detail then your answer can be valid (e.g. Mr. W sitting on a remote-controlled car that is being driven around an airport runway at a constant speed MAY work – Mis Orson at the controls!!!

After the first 2 hours Mr. W needed to stop for 30 minutes for a rest or for other reasons. E.g. a traffic jam!!

Mr. W then accelerates and is able to travel 18 miles in 30 minutes (that would be 36 miles in an hour or 36 mph!). This would be impossible for a world record runner - let alone Mr. W - so that's now not an option unless Mr. W wore rocket boosters on his shoes!! A story about him being a cyclist might work.

If your answer is way of the mark – don't worry! We hope that the answer above will help you in your understanding of how these graphs work. You need to make sure you have a story that makes sense and matches the lines and the distance and time achieved in the graph.