Speed

Forces 3.1.1 | Part 1, usually Year 7 | 20 quick questions

KS3 science quick questions

Answer online, marked instantly

Activate 2: Motion and pressure | Exploring Science 9I

Name: _____ **Date:** _____ **Score:** _____ **/ 20**

1 What do we call how far something travels in a set amount of time? Answer in one word.

2 What is the standard unit of speed? Give the unit symbol.

3 Write the equation for speed using the words distance and time.

4 A girl cycles 300 m along a path in 60 s. What is her speed? Give your answer in m/s.

5 On a distance-time graph, a straight sloping line shows an object moving at what kind of speed? Answer in one word.

6 A coach drives 120 km in 2 hours. What is its speed in km/h?

7 A tram moves at a steady 20 m/s for 30 s. How far does it travel? Give your answer in metres.

8 A rowing boat travels 100 m at 5 m/s. How many seconds does the trip take?

9 On a real journey you speed up and slow down. What do we call the total distance divided by the total time? Answer in two words.

10 On a distance-time graph, what does a flat, horizontal line tell you about the object?

11 On a distance-time graph, what does the steepness of a straight line tell you? Answer in one word.

12 A rolling ball has a resultant force on it acting backwards, against its motion. Does it speed up, slow down or keep a steady speed?

13 Two cars on a motorway drive side by side, both at 30 m/s in the same direction. What is the speed of one car compared with the other? Give your answer in m/s.

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14 Two friends jog towards each other, one at 3 m/s and the other at 2 m/s. How fast is the gap between them closing, in m/s?

15 You time a toy car rolling along a short track. Name one piece of equipment you could use to measure the time.

Year 9 stretch

16 A swimmer covers 1.5 km in 500 s. What is her speed in m/s?

17 A skateboarder rolls at 4 m/s for 2 minutes. How far does he travel, in metres?

18 A walker goes 600 m in 200 s, rests for 100 s, then walks 400 m in 200 s. What is her average speed for the whole trip, in m/s?

19 On a distance-time graph the line curves and gets steeper and steeper. What is the object doing? Answer in one word.

20 Explain why a passenger sitting on a moving bus could say she is not moving.

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