

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 The units for speed depend on the units for the distance and the time. Fill in the table.

| Units for distance | Units for time | Units for speed     |     |
|--------------------|----------------|---------------------|-----|
| miles              | hours          |                     | mph |
| kilometres         |                | kilometres per hour |     |
|                    | seconds        |                     | m/s |

2 A car travels 250 miles in 5 hours.

a Complete the equation for calculating speed.

$$\underline{\hspace{2cm}} = \frac{\text{distance}}{\underline{\hspace{2cm}}}$$

b What are the units of speed when distance is in miles and time is in hours? \_\_\_\_\_

3 What is mean speed? Tick (✓) the best answer.

- The top speed in a journey.
- The total distance travelled divided by the total time taken.
- The speed on a journey where the speed did not change at all.

4 A bus makes a 10 mile journey through town. Its top speed is 30 mph and its mean speed is 10 mph. Explain why these speeds are different.

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5 The distance–time graph shows a journey by car.

- a Write an F on the graph next to the part of the journey with the fastest speed.
- b Write an S on the graph where the car stopped.
- c How long did the car stop for?

\_\_\_\_\_

d What was the total distance travelled?

\_\_\_\_\_

e The car travels 25 miles in the first 0.5 hours of the journey. Calculate its mean speed for this part of the journey.

speed =



**I can...**

- describe the meanings of speed and mean (average) speed
- use the formula relating speed, distance and time
- interpret a distance–time graph.