

110 velocity problems

To receive credit:

- **Write all answers in your bound journal**
- **When working a problem, show all your math and box your final answer**
- **-2pt if there is no title the entry**
- **- 2pt if you do not date the entry**
- **-2pts if you do not have units on final answers**

1. A girl cycles for 3.00hrs at a speed of 40.0 km/h. What distance did she travel?
2. A train travels at a speed of 30.0mph and travel a distance of 240.0 miles.
How long did it take the train to complete its journey?
3. A car travels a distance of 540.0km in 6.00 hours. What speed did it travel at?
4. John is a runner. He runs the 100.m sprint in 10.6s. What speed did he travel at? (in m/s)
5. A cyclist travels 20.00km in 4.00hrs. What speed did the cyclist cycle at?
6. The distance between two cities is 144.00km, it takes me 3.00 hours to travel between these cities. What speed did I travel at?
7. A coach travels from the station to the beach, a distance of 576km away in 6.00hrs. The coach is only allowed to travel at a maximum speed of 90.0km/h. Did the coach break the speed limit?
8. At the equator, the earth spins a distance of 25,992 miles every day. What speed does the Earth spin at in mph?
9. Lauren walks 100.00m in half a minute. What must her speed have been to travel this distance?
10. A mouse runs a distance of 2.00 metres in 15.0 seconds. What is its speed?
11. Jim travelled at a speed of 18.00km/h for 2.00 hours. What was the distance covered?
12. Marc was told his dinner would be ready at 18:00. He left his house at 12:00 and travelled in his car at an average speed of 45.0 mph to his mum's house 300.00 miles away. Did Marc make it home in time for dinner?
13. A whale swims at a constant speed of 8.00 m/s for 17.0 s. What distance did it travel?
14. Callum writes down his jog times for each day.
Mon . 15.00min
Tue . 10.00min
Wed . 12.00min
Thu . 5.00min
Fri . No jog.
He jogs at a constant speed of 9.00km/h. Work out the distance he jogs each day. On which day did he jog the furthest?

15. How long does it take to drive a distance of 260.0 miles at a speed of 65.0mph?
16. How long does it take to travel a distance of 672km at a speed of 96.0km/h?
17. Carlisle is a distance of 135 miles away from Airdrie. If I travelled at a constant speed of 45.0mph. How long would it take me to get there?
18. A beetle travels at a speed of 9.00cm/s., it travels a distance of 108cm before it is caught in a jar. How long did the beetle run for?
19. Neil travelled 36.0km at a speed of 8.00km/h. Grant travelled 48.0km at a speed of 10.0km/h
 - a) Whose journey was quickest?
 - b) By how many minutes?
20. Susie estimated that she can run for hours at a steady rate of 8.00mph. She enters a marathon, a distance of 26.2miles. How long should it take her to complete the race? Give answer in hours/minutes.
21. Mr Dunne drives 64.8km from work at a speed of 48.0 km/h. Mrs Dunne drives 81.2km from work at a speed of 58.0km/h. They both leave work at the same time.
 - a) Who arrives home first?
 - b) How many minutes later is it before the second person gets home?
22. The earth takes one year to go round the sun. The distance travelled is 584 million miles if there are 365 days in a year, what speed does the earth travel at in miles per day? What is the speed of the earth in miles per hour?