



# SPEED



## ACTIVITY 1: Fill in the missing words!

**Speed** is a measure of how \_\_\_\_\_ things are moving.

We can calculate the speed of an object by measuring the \_\_\_\_\_ that the object has moved and **dividing** it by the \_\_\_\_\_ taken.

This can be written as a formula.

$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$

In science, we measure speed in **metres per second** (m/s) or, sometimes, we measure it in \_\_\_\_\_ per hour.

Nothing in the universe can move faster than the speed of \_\_\_\_\_.

## ACTIVITY 2: QUESTION TIME!

Answer the following questions in your books. **Show full working out** in order to get **full** marks. Also, beware of **evil** trickery and naughtiness!!!!

1. Dave the sheep walks 20 m in 4 seconds. Calculate his **speed**.
2. Molly the mouse scuttles 4 m in 0.5 s. How **fast** is she moving?
3. Eric drives his car 300 km in 2 hours. What is Eric's **average speed**?
4. Freddy snail moves 20 **cm** in 10 seconds. What is his speed in **metres per second**?
5. Nigel, a very surprised giraffe, travels 2.5 km in 4 seconds. How **fast** was he moving?
6. How **long** will it take a driver travelling at 120 km/h to travel 300 km?
7. An ambitious rodent runs at 5.5 m/s for 20 seconds. How **far** has it moved in this time?



## SCIENCE GEEKS

# BONUS SPEEDY BITS

1. A van travels 250 km in 2 hours. Calculate its speed in km/h.
2. Eric the lazy worker walks 12 m in 2 minutes. What is his speed in m/s?
3. Ken Barlow can walk up to speeds of 3 m/s at times. How far would he have walked if he kept this up for 3 minutes?
4. How long would it take a shark traveling at 10 m/s to reach its prey 200 m away?
5. A car travels at 80 miles per hour. How long would it take it to travel a distance of 100 miles?
6. If you walked at 2 m/s, how long would it take you to walk from Morpeth to Newcastle (distance 24 km)?
7. How far would a paint ball pellet, travelling at 250 m/s move in 0.5 s ?



## BOFFIN BRAINSTORMERS!!

1. There are 1600 m in 1 mile. Using this information, convert the following speeds into kilometres per hour.
  - a) 20 miles per hour
  - b) 70 miles per hour
  - c) 100 miles per hour
2. If a lorry is travelling at 80 km/h, what is its speed in m/s?
3. The speed of light is 300,000,000 m/s. If light takes 8 minutes to reach us from the sun, how far away from the earth is the sun?
4. A cricket ball leaves a fast bowler's hand at speeds of up to 160 km/h. How long do you have to react if you are batting 25 m away?
5. A snowboarder travels at 20 m/s down a mountain. How fast is this in km/h?