


Movement



Speed

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|--|--|-------------------------|--|
| A measurement of how fast an object moves. | The distance an object moves in a unit time. | Speed = Distance / Time | Metric Units kilometre per hour (km/h) metre per second (m/s) centimetre per second (cm/s) |
|--|--|-------------------------|--|

Speed = Distance / Time

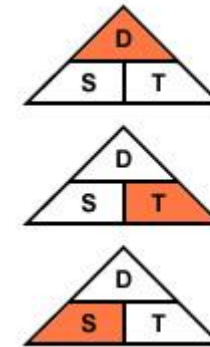
- Irfan's toy car takes 5 seconds to complete a distance of 20 metres. What is the speed of the toy car?
- $20 \text{ m} / 5 \text{ s} = 4 \text{ m/s}$

Time = Distance / Speed

- A robot can move at a speed of 6 cm/s. How long will it take to move a distance of 72 cm?
- $72 \text{ cm} / 6 \text{ cm/s} = 12 \text{ s}$

Distance = Speed x Time

- Suet Yee drives at 85 km/h. How far does she travel in 4 hours?
- $85 \text{ km/h} \times 4 \text{ h} = 340 \text{ km}$



$$\text{Distance} = \text{Speed} \times \text{Time}$$

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

Relationship between Distance, Time and Speed

Given Distance

An object which **move faster** takes a **shorter time** in travel a given distance.



The greater the speed of an object is, the shorter is the time taken to travel a given distance.

Given Time

An object which **move faster** travels a **longer distance** in given time.



The greater the speed of an object is, the longer the distance travelled in a given time.