

Name: \_\_\_\_\_

1. Using the symbols for average speed ( $s$ ), distance ( $d$ ) and time ( $t$ ) complete these formulae.

$s =$	$d =$	$t =$
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2. Find the average speed of a sprinter who ran 120 metres in 15.8 seconds.

Give answer in m/sec correct to one decimal place.

3. Find the average speed of a marathon runner who ran a marathon (42 km) in 2 hours 25 minutes and 27 seconds.

Give answer in m/sec correct to one decimal place.

4. Find the distance travelled by a lion running at an average speed of 12.5 m/s for 25 seconds.

5. Find the distance travelled by a yacht sailing at an average speed of 15 km/hr for 22 minutes. Give answer in km.

6. How long will it take a cyclist travelling at 25 km/hr to cycle 800 m? Give answer in seconds.

7. Ki's car has a fuel consumption of 8 L per 100 km.

(a) How many litres will her car use travelling 350 km?

(b) Ki used 42 litres on a trip. How far did she travel?

8. How many grams of salt are in 20 litres of salt/water solution that has a salt concentration of 60 g/L?

9. 50 litres of salt/water solution with salt concentration 40 g/L is added to 100 litres of salt/water solution with salt concentration of 10 g/L.

What is the salt concentration of the final solution?

10. The density of a hardwood was 850 kg/m<sup>3</sup>. What would be the mass of the block of this wood shown below?

