

## Compound Measures

Compound measures	involve two separate units of measurement	Miles per hour	m.p.h
	they are... <i>measures that require more than one unit to give their value.</i>	Kilometres per hour	km.p.h
		Metres per second	m/s
		Miles per litre	

(Oxford Study Mathematics dictionary)

### The Rules:

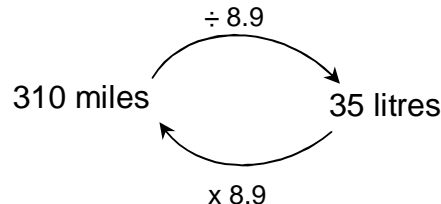
1. Identify the values and units
2. Perform the calculation and identify the units
3. Round up as necessary

#### *Example 1*

Priti's car uses 35 litres of petrol to travel 310 miles. What is the rate of petrol consumption?

The rate of petrol consumption =  $= 310 \text{ miles for every } 35 \text{ litres}$   
 $= \frac{310}{35} \text{ for every } 1 \text{ litre}$   
 $= 8.85714... \text{ miles for every litre}$   
 $= 8.9 \text{ miles per litre (1 decimal place)}$

This means that for every 1 litre of petrol used the car travels 8.9 miles



#### *Example 2*

Shola runs in a race. She travels 100 m in 10.23 seconds. What is her average speed?

The speed (rate of travel) of Shola =  $= 100 \text{ metres for every } 10.23 \text{ seconds}$   
 $= \frac{100}{10.23} \text{ in every } 1 \text{ second}$   
 $= 9.77517... \text{ m in every } 1 \text{ second}$   
 $= 9.8 \text{ m/s (1 decimal place)}$

This means that in every second Shola covers a distance of 9.8 metres.

