Converting Measures of Length: BRONZE challenge

L.O - I can convert between millimetres, centimetres, metres and kilometres.

1. Write out each measurement in **mm** and **cm:**

   a) 30 mm
   b) 45 mm
   c) 90 mm
   d) 1 mm
   e) 107 mm
   f) 23 cm
   g) 5 cm
   h) 19 cm
   i) 100.5 mm

   j) 104 cm
   k) 394 cm
   l) 287 mm
   m) 362 mm
   n) 0.5 cm
   o) 0.5 mm
   p) 8.3 cm
   q) 20.7 cm
   r) 1030 mm

2. Write out each measurement in cm and m:

   a) 3 m
   b) 14 m
   c) 800 cm
   d) 927 cm
   e) 2.98 m
   f) 3.25 m
   g) 0.5 m
   h) 9.57 m

   i) 50 cm
   j) 3006 cm
   k) 263 m
   l) 0.75 m
   m) 28.2 m
   n) 49.3 cm
   o) 203.7 m

3. Work out the following problems and show your working:

   a) Bob had 5 metres of string. He wanted to share this equally between 10 of his friends to make shoe laces. How many centimetres of string would each of his friend have?
   b) Tracy used to run 1.5 km a day until she was 30 years old. She then started to run 486 metres less each day. How many metres did she now run each day?
   c) Max's shed door was 1.2 metres tall and 90 cm wide. He wanted to buy some wood to make a frame around the door, but the wood is measured in millimetres. What would these measurements be in millimetres?
   d) The distance from Flo's house to Fred's house is 2.78 km following the motorway and 23970 cm following the country roads. Which way is shorter and by how much?

Converting Measures of Length: SILVER challenge

L.O - I can convert between millimetres, centimetres, metres and kilometres.

4. Write out each measurement in **mm, cm** and **m:**

   j) 38 mm
   k) 45 mm
   l) 289 mm
   m) 10 mm
   n) 107 mm
   o) 23 m
   p) 5 cm
   q) 19 cm
   r) 100.5 mm
   s) 19.6 cm

   i) 104 cm
   j) 394 cm
   k) 28.7 m
   l) 362 m
   m) 0.5 cm
   n) 0.5 m
   o) 8.3 cm
   p) 20.7 cm
   q) 1030 mm
   r) 66.4 mm

5. Write out each measurement in **cm, m** and **km**:

   i) 3 km
   j) 14 m
   k) 800 cm
   l) 927 cm
   m) 2.982 km
   n) 3.25 m
   o) 0.57 m
   p) 9.57 m

   p) 50 cm
   q) 3006 cm
   r) 263 m
   s) 0.75 km
   t) 28.2 m
   u) 4.93 km
   v) 203.7 m
   w) 3009 cm

6. Work out the following problems and show your working:

   e) Bob had 5.84 metres of string. He wanted to share this equally between 10 of his friends to make shoelaces. How many centimetres of string would each of his friend have?

   f) Tilly used to run 3.28 km a day until she was 30 years old. She then started to run 736 metres less each day. How many metres did she now run each day?

   g) Malc's shed door was 3.72 metres tall and 92 cm wide. He wanted to buy some wood to make a frame around the door, but the wood is measured in millimetres. What would these measurements be in millimetres?

   h) Andy wanted to measure the lengths of different animals. He recorded a lynx as 3.87m, an elephant as 194cm and a viper as 4582mm. A room in the zoo was 0.23km wide, would the animals be able to stand in a line behind each other in this room?

Converting Measures of Length: GOLD challenge

L.O - I can convert between millimetres, centimetres, metres and kilometres.

7. Write out each measurement in **mm, cm, m** and **km:**

t) 230 mm
u) 45 cm
v) 289 m
w) 1.2 km
x) 107 m
y) 23 mm
z) 5 cm
aa) 19 cm
bb) 100.5 m
cc) 19.6 cm
dd) 35.29 m

m) 104 cm
n) 394 cm
o) 28.7 m
p) 362 m
q) 0.5 cm
r) 0.5 m
s) 8.3 cm
t) 20.7 cm
u) 1030 mm
v) 66.4 mm
w) 37.3 km

8. Work out the following problems and show your working:

i) Bob had 7.34 metres of string. He wanted to share this equally between 10 of his friends to make shoelaces. How many centimetres of string would each of his friend have?

j) Tilly used to run 3.28 km a day until she was 30 years old. She then started to run 736 metres less each day. How many metres did she now run each day?

k) Malc's shed door was 3.72 metres tall and 92 cm wide. He wanted to buy some wood to make a frame around the door, but the wood is measured in millimetres. What would these measurements be in millimetres?

l) Andy wanted to measure the lengths of different animals. He recorded a lynx as 3.87m, an elephant as 194cm and a viper as 4582mm. A room in the zoo was 0.23km wide, would the animals be able to stand in a line behind each other in this room?

m) A piece of wood is 1.49m long. Joe cuts off 59mm from one end and then Bill cuts off 28.2 cm from the other end. How much would is left in cm and mm?

n) Barry drove a lorry which, in total, was 8.46m long, this includes the cabin and the trailer. The trailer on the lorry was 68.5cm long. What was the length of the cabin?

o) Brenda made a stack of her collection of 'Home' magazines. Each magazine on the pile 2.5 mm thick. The total height of the stack was 11.5cm high. How many magazines did she have in her pile?