Measurements

Date: _____

Practice I **Converting a measurement from a larger unit to a smaller unit**

I Convert to centimetres.

   a $3\,m = 3 \times 100 =$ _____ cm

   b $1\cdot5\,m =$ _____

   c $1\cdot567\,m =$ _____

   d $715\cdot9\,m =$ _____

2 Convert the following to metres and centimetres.

   a $7\cdot6\,m$

   b $86\cdot4\,m$

      $0\cdot6\,m = 0\cdot6 \times 100 =$ _____ cm

      $7\cdot6\,m =$ _____ m = _____ cm

   c $3\cdot14\,m$

   d $217\cdot9\,m$

   e $78\cdot01\,m$

   f $93\cdot64\,m$

3 Convert to metres.

a 12 km = 12 × 1000 = _____ m **E**	**b** 78·54 km = _____ m **V**
c 20·9 km = _____ m **I**	**d** 7·5 km = _____ m **N**
e 16·3 km = _____ m **B**	**f** 0·56 km = _____ m **S**

What is the highest mountain in Scotland? Write the letters which match the answers to find out.

___   ___   ___   ___   ___   ___   ___   ___

16 300   12 000   7500   7500   12 000   78 540   20 900   560

---

4 Convert the following to kilometres and metres.

a   9·3 km

     0·3 km = 0·3 × 1000

          = _____ m

     9·3 km = _____ km _____ m

b   61·5 km

c   20·08 km

d   5·009 km

5 Convert to grams.

a $\quad 5\,kg = 5 \times 1000 = $ _____ g

b $\quad 3{\cdot}6\,kg = $ _____ g

c $\quad 6{\cdot}04\,kg = $ _____ g

d $\quad 130{\cdot}5\,kg = $ _____ g

6 Convert the following to kilograms and grams.

a $\quad 1{\cdot}752\,kg$

$\qquad 0{\cdot}752\,kg = 0{\cdot}752\,kg \times 1000$

$\qquad\qquad = $ _____ g

$\qquad 1{\cdot}752\,kg = $ _____ kg _____ g

b $\quad 3{\cdot}25\,kg$

c $\quad 4{\cdot}9\,kg$

d $\quad 12{\cdot}6\,kg$

e $\quad 90{\cdot}32\,kg$

f $\quad 6{\cdot}004\,kg$

7 Convert to millilitres.

a $\quad 8\,\ell = 8 \times 1000 = $ _____ ml

b $\quad 61{\cdot}4\,\ell = $ _____

c $\quad 0{\cdot}07\,\ell = $ _____

d $\quad 18{\cdot}03\,\ell = $ _____

8 Convert the following to litres and millilitres.

a   1·056 ℓ

$$0·056 \, ℓ = 0·056 \times 1000$$

$$= \underline{\hspace{2cm}} ml$$

$$1·056 \, ℓ = \underline{\hspace{2cm}} ℓ \underline{\hspace{2cm}} ml$$

b   2·39 ℓ

c   65·4 ℓ

d   18·7 ℓ

e   3·04 ℓ

f   95·003 ℓ

Solve these word problems. Show your workings clearly.

9 Alisha wants to make some banners for her school's sports day. She buys a roll of material 3·6 m long. She divides it equally to make 8 identical banners. What is the length of each banner in centimetres?

10 📱 450 packets of raisins have a mass of 6·75 kg. What is the mass of 5 packets in grams?

11 Mrs Thomas walks 2 km in 1 hour. How far does she walk in 1 minute? Give your answer in metres to 1 decimal place.

12 🖩 A cafe served 5 cups of coffee every hour. Each cup contained 0·22 ℓ of coffee. How many litres and millilitres of coffee were served in a day if the cafe was open for 24 hours?

13 🖩 A pack of paper has a mass of 3·5 kg.

    a   What is the mass of 25 packs of paper? Give your answer in kilograms and grams.

    b   If each pack has 500 sheets of paper, what is the mass of each sheet of paper? Give your answer in grams.