Convert metric units of weight and capacity
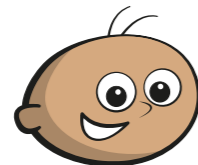
1 **a)** Match the measurements to the numbers.

cl in a litre	
g in a kg	
ml in a l	10
ml in a cl	100
mg in a g	1,000

b)

There are one million milligrams in a kilogram.

Is Tommy is correct? _____

Show your workings.

2 Convert these masses to grams.

a) 6 kg   6.5 kg   6.05 kg

[   ] g   [   ] g   [   ] g

b) 3,000 mg   3,100 mg   300 mg

[   ] g   [   ] g   [   ] g

3 Convert these masses to kilograms.

a) 8,000 g   48,000 g   48,600 g

[   ] kg   [   ] kg   [   ] kg

b) 800 g   820 g   82 g

[   ] kg   [   ] kg   [   ] kg

4 A packet of crisps weighs 30 g.

The total mass of crisps in a box is 9 kg.

Filip is working out how many packets of crisps there are in the box.

$$\frac{9 \text{ kg}}{30 \text{ g}} = \frac{900 \text{ g}}{30 \text{ g}} = \frac{90}{3} = 30 \text{ packs}$$

a) Explain Filip's mistake.

_____

_____

b) How many packets of crisps are in the box?

[   ] packets

5 Convert these capacities to litres.

a) 9,000 ml [____] litres   9,300 ml [____] litres   300 ml [____] litres

b) 200 cl [____] litres   2,000 cl [____] litres   20 cl [____] litres

6 Write >, < or = to complete the statements.

a) 300 ml ◯ 300 cl   e) 5 cl + 250 ml ◯ 0.75 litres

b) 4,000 g ◯ 40 kg   f) 1.5 litres ◯ 800 ml + 70 cl

c) 2 litres ◯ 20 cl   g) 0.3 kg ◯ 500 g – 2,000 mg

d) 0.35 kg ◯ 350 g   h) 300 g ◯ 0.2 kg + 80,000 mg

7 a) In a shop, onions cost 30p for 200 g.
Work out the cost of 3 kg of onions.

£ [____]

b) Potatoes cost £1.40 per kilogram.
Work out the cost of 600 g of potatoes.

£ [____]

8 Here is a recipe for pancakes.

Flour costs £1.20 for a 1 kg bag.

Eggs cost £1.50 for a box of 6

Milk costs £1.80 for a 2 litre bottle.

Butter costs £1.60 for 250 g.

Dora wants to make 60 pancakes.

Work out how much she will need to spend on ingredients.

> **Makes 12 pancakes**
>
> 150 g flour
>
> 2 eggs
>
> 300 ml milk
>
> 20 g butter

£ [____]

9 A bucket weighs 700 g.

When half full of water the bucket weighs 3.2 kg.

Work out the mass of the bucket when it is full of water.

[____] kg

10 600 ml of oil weighs 480 g.

Work out the mass in kg of 2 litres of oil.

[____] kg