Lesson 2 Measures

LO: To convert and compare units of weight

Layer 1

<table>
<thead>
<tr>
<th>g</th>
<th>Kg</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>457</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3570</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64,570</td>
<td></td>
<td>14.3</td>
</tr>
</tbody>
</table>

Layer 2

A parcel weighs 439 grams.
How much would 27 parcels weight?
Give your answer in kilograms.

A man weighs 90 kg.
He is carrying a backpack which is 10% of his weight.
His shoes weigh 2% of his weight.
His hat weighs 3% of his weight.
How much does he weigh including all of his equipment?

There are two batches of cakes:

<table>
<thead>
<tr>
<th>Batch A:</th>
<th>Batch B:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunflower Oil = 500g</td>
<td>Sunflower Oil = 0.5kg</td>
</tr>
<tr>
<td>Flour = 1250g</td>
<td>Flour = 1.375kg</td>
</tr>
<tr>
<td>Water = 325g</td>
<td>Water = 1.325kg</td>
</tr>
<tr>
<td>Sugar = 795g</td>
<td>Sugar = 0.8kg</td>
</tr>
<tr>
<td>Butter = 1400g</td>
<td>Butter = 0.14kg</td>
</tr>
</tbody>
</table>

Miss Kite says “I should use batch A because there is a smaller amount of ingredients required.” Is she correct?

Show your working.

Layer 3

Miss Brown is making a packed lunch for each child in her class.
They each receive:
A 200g sandwich
A 35g packet of crisps
A 72g cookie
A 43g apple
She has 32 children in her class.
What is the total weight of the classes packed lunches?
To bake buns for a party, Ron used these ingredients:
- 600g caster sugar
- 0.6kg butter
- 18 eggs (792 g)
- ¾ kg self-raising flour
- 10g baking powder

What is the total mass of ingredients? Give your answer in kilograms and grams.

If you were making cakes for 3 parties, what would be the weight of eggs used? Give your answer in grams and kilograms.

**Greater Depth**

10 toy bricks have a total mass of 1kg.
A cricket ball weighs 1 ½ times as much as one brick.
What is the mass of a cricket ball, in grams?

In a story, Jack has to choose between two magic gold eggs to buy.
What would you advise him to do?

Egg A Mass when he buys it: 1.2 g Mass doubles each day
Egg B Mass when he buys it: 125 g Mass increases by 0.01 kg each day.