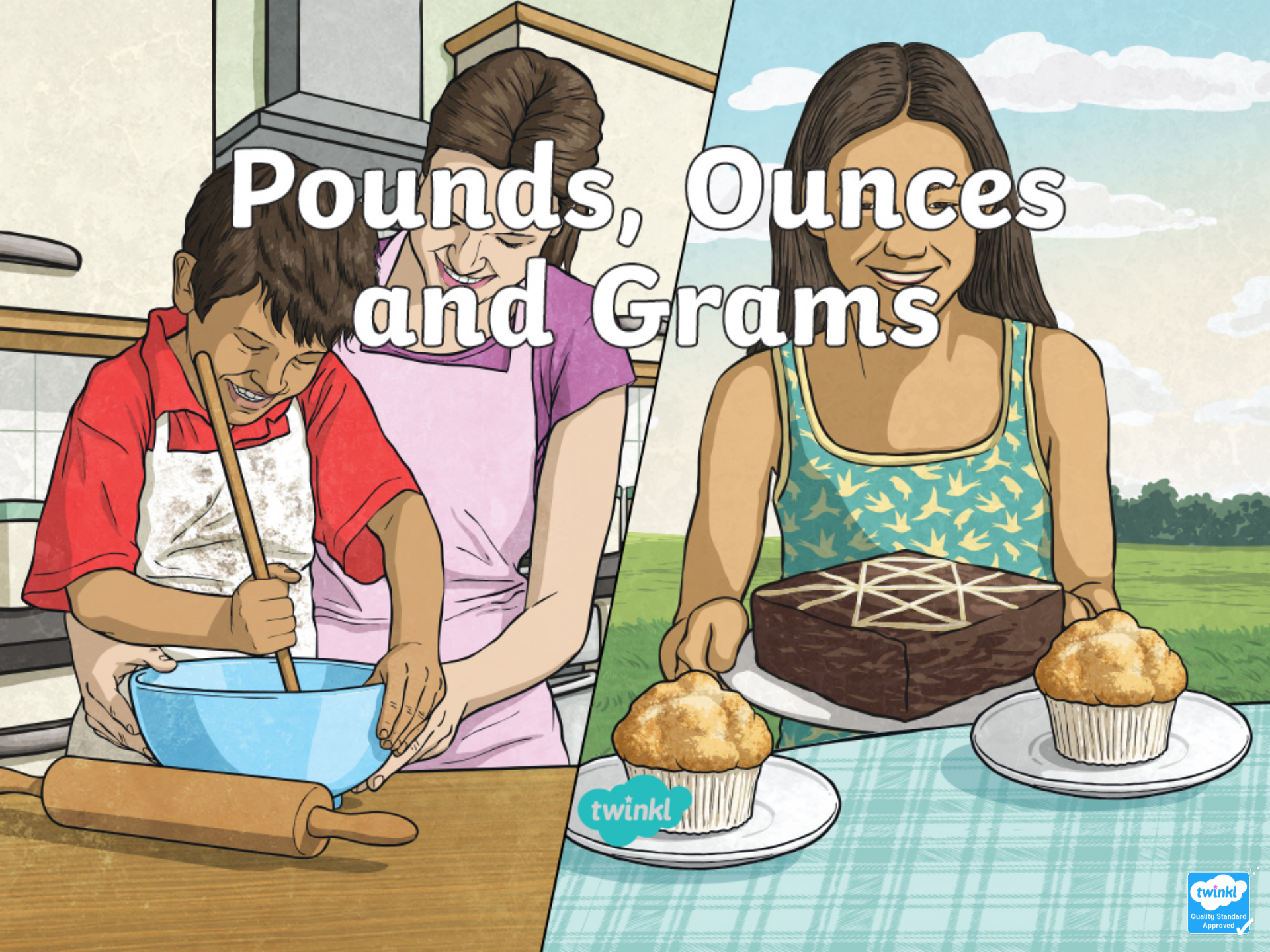
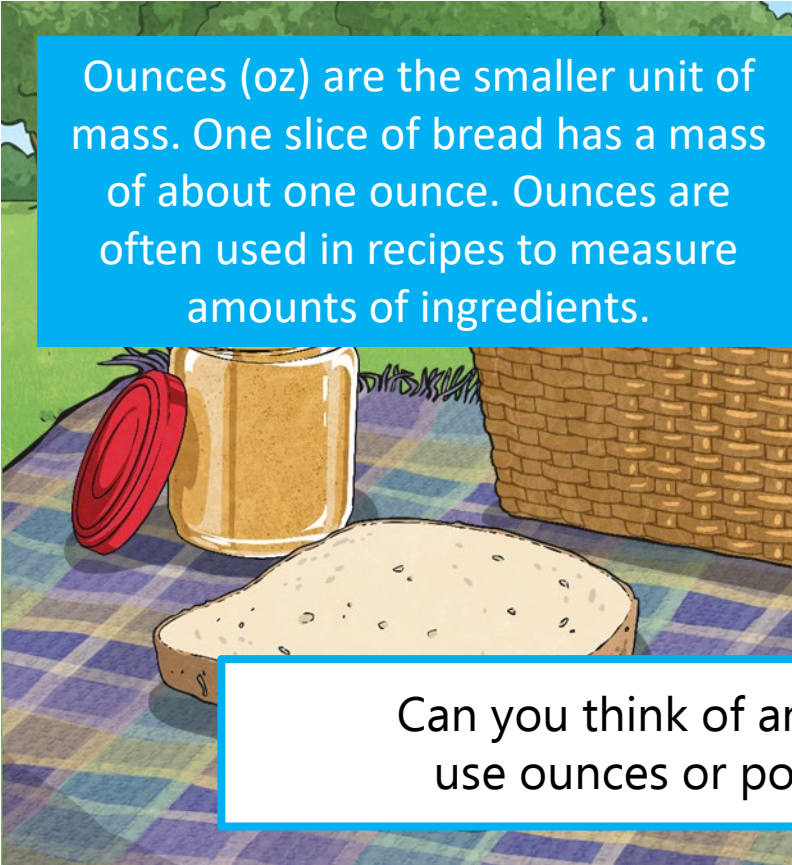


Pounds, Ounces and Grams

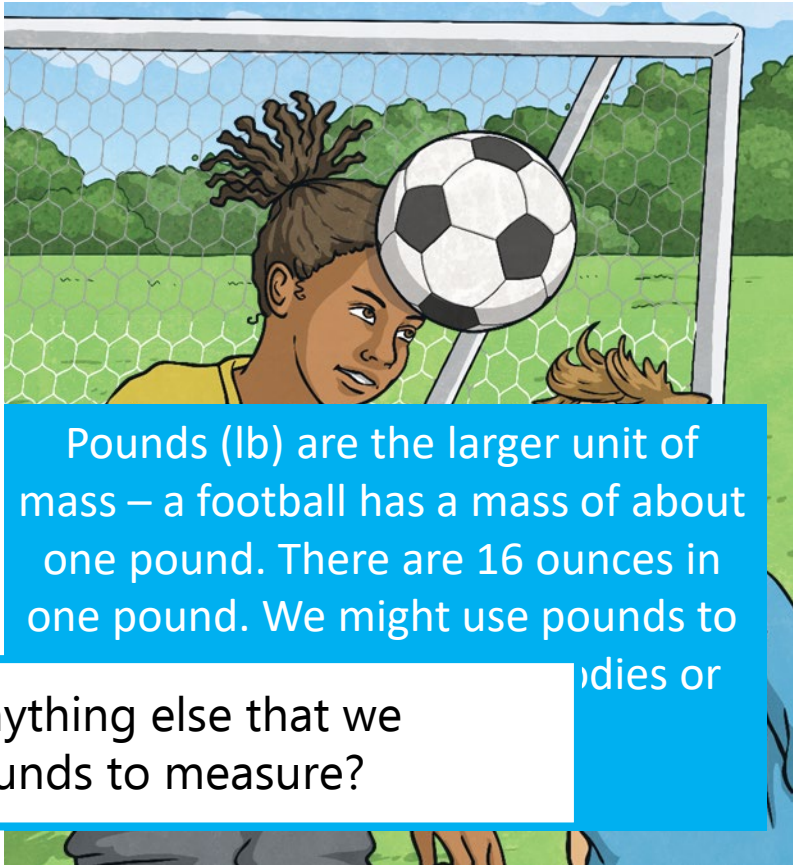


Imperial Units of Mass

The imperial system of measurement uses ounces and pounds to measure mass.



Ounces (oz) are the smaller unit of mass. One slice of bread has a mass of about one ounce. Ounces are often used in recipes to measure amounts of ingredients.



Pounds (lb) are the larger unit of mass – a football has a mass of about one pound. There are 16 ounces in one pound. We might use pounds to measure bodies or

Can you think of anything else that we use ounces or pounds to measure?

Ounces and Grams



$$1\text{oz} \approx 28\text{g}$$

How could you work out how many grams are approximately equal to...

Remember that the \approx sign means **approximately equal to**.

Ounces	Grams
2oz	56g
5oz	140g
6oz	168g

double

$\times 5$

$\times 10$ and find half

add

another method?

Ounces and Grams



$$1\text{oz} \approx 28\text{g}$$

How could you work out how many grams are approximately equal to...

Remember that the \approx sign means **approximately equal to**.

Ounces	Grams
2oz	
5oz	
6oz	

double

$\times 5$

$\times 10$ and find half

add

another method?

Ounces and Grams



$$1\text{oz} \approx 28\text{g}$$

Can you think
of another way to
work this out?

Ounces	Grams	
$\frac{1}{2}$ oz	14g	$28\text{g} \times 2 = 56\text{g}$
$2\frac{1}{2}$ oz	70g	$28\text{g} \div 2 = 14\text{g}$ $56\text{g} + 14\text{g} = 70\text{g}$

double

halve

$\div 2$

add

another method?

Ounces and Grams



$$1\text{oz} \approx 28\text{g}$$

How could you work out how many grams are approximately equal to...

Ounces	Grams
$\frac{1}{2}$ oz	
$2\frac{1}{2}$ oz	

double

halve

$\div 2$

add

another method?

Ounces and Grams



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double

halve

$\div 2$

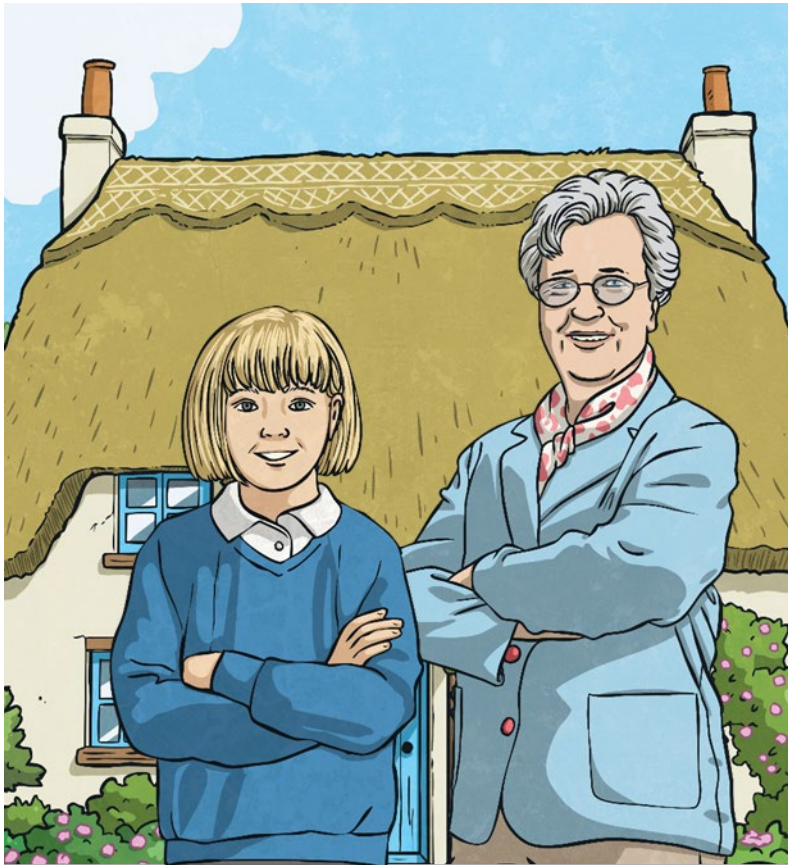
add

another method?

Recipes



Lucy's grandma has given her an old book of cake recipes.
The ingredients have been written in imperial measurements.



Lucy only has a set of scales that
measure in metric units!

She wants to convert her grandma's
recipes from ounces
to grams so that she can make them
herself.



Recipes



The first page in Lucy's grandma's book has a list of ingredients for making shortbread.

1oz \approx 28g

Shortbread
Ingredients (oz)
makes 12

8oz butter
6oz sugar
10oz plain flour

Shortbread
Ingredients (g)
makes 12

Convert the measurements given in ounces into grams:

Recipes



The first page in Lucy's grandma's book has a list of ingredients for making shortbread.

1oz \approx 28g

Shortbread
Ingredients (oz)
makes 12

8oz butter
6oz sugar
10oz plain flour

Shortbread
Ingredients (g)
makes 12

224g butter
168g sugar
280g plain flour

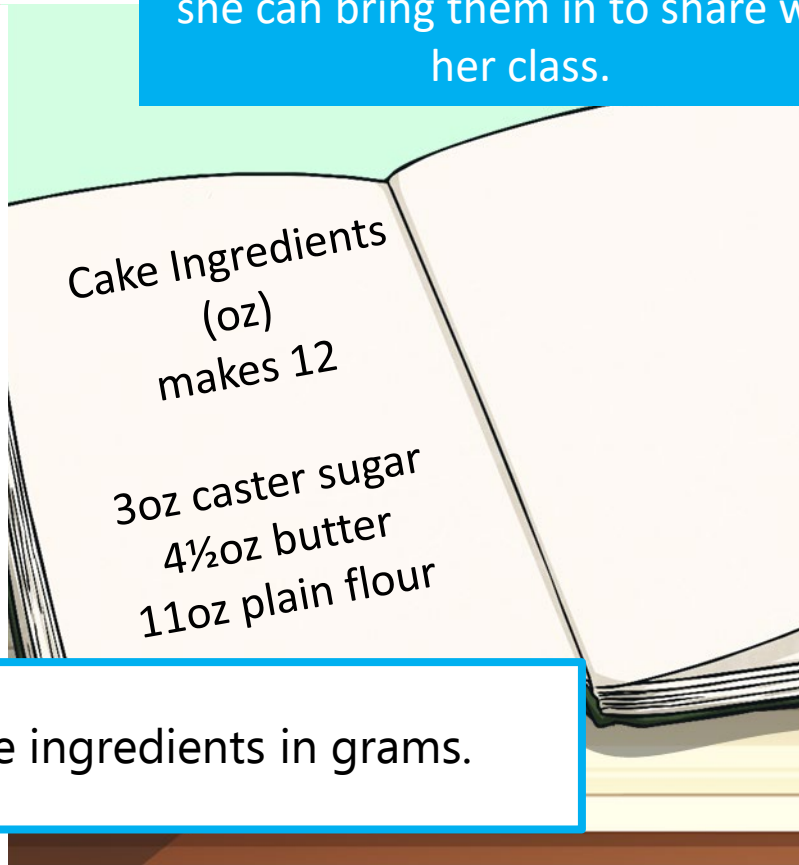
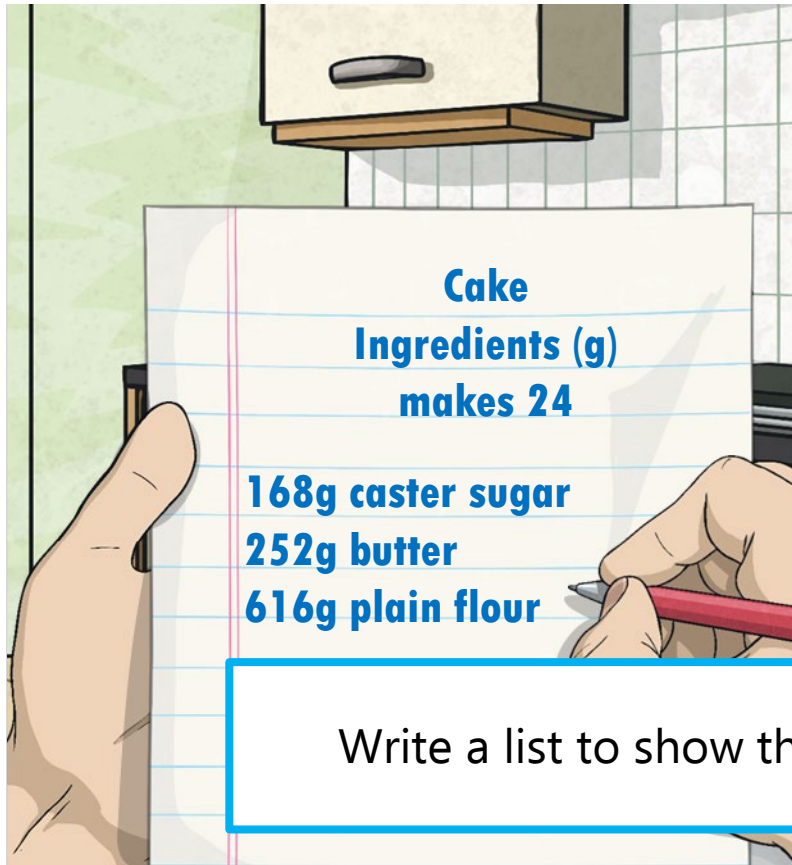
Convert the measurements given in ounces into grams:

Recipes



1oz \approx 28g

Lucy found a recipe for chocolate cake. She wants to make **24** cakes so she can bring them in to share with her class.



Write a list to show the ingredients in grams.

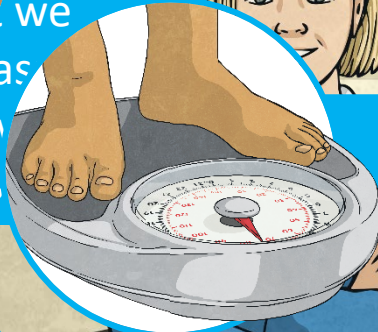
Pounds, Grams and Kilograms

We usually measure certain objects in either pounds or kilograms.



In shops, people find the mass of their fruit in grams and kilograms.

of any
we
reas
in pounds? How
kilograms



A lot of people record their mass in either kilograms or pounds.




We weigh babies at birth and record their mass in pounds.

Can you think of any objects that we might use either unit to measure?

Pounds, Grams and Kilograms

We usually measure certain objects in either pounds or kilograms.

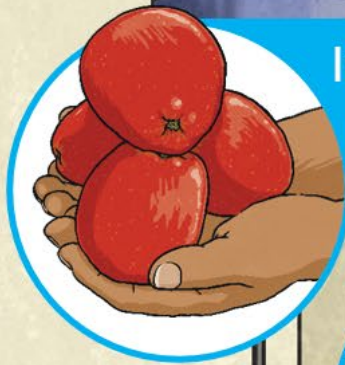
An illustration of a young boy with blonde hair and a blue sweater standing next to an older man with grey hair, glasses, and a blue jacket. They are in a living room with a lamp, framed pictures, and patterned armchairs. The boy has his arms crossed.

Can you think of any objects that we normally measure in pounds? How about kilograms?

Can you think of any objects that we might use either unit to measure?

Pounds, Grams and Kilograms

We usually measure certain objects in either pounds or kilograms.



In shops, people find the mass of their fruit in grams and kilograms.



A lot of people record their mass in either kilograms or pounds.



We weigh babies at birth and record their mass in pounds.

Pounds, Grams and Kilograms



$$1\text{lb} \approx 450\text{g}$$

One of Lucy's grandma's recipes lists a pound of flour as one of the ingredients. Lucy needs to work out how much this is in grams so that she can measure the correct amount on her scale.

We could also write these measurements in kilograms.

1lb	2lb	5lb	10lb	15lb
0.45kg	0.9kg	2.25kg	4.5kg	6.75kg

Pounds, Grams and Kilograms



$$1\text{kg} \approx 2.2\text{lb}$$

?

How could you work out what 6.6lb would be in kilograms?

Lucy's baby sister had a mass of 6kg when she was three months old. Lucy's grandma

There are three lots of 2.2 in 6.6, so 3kg = 6.6lb.

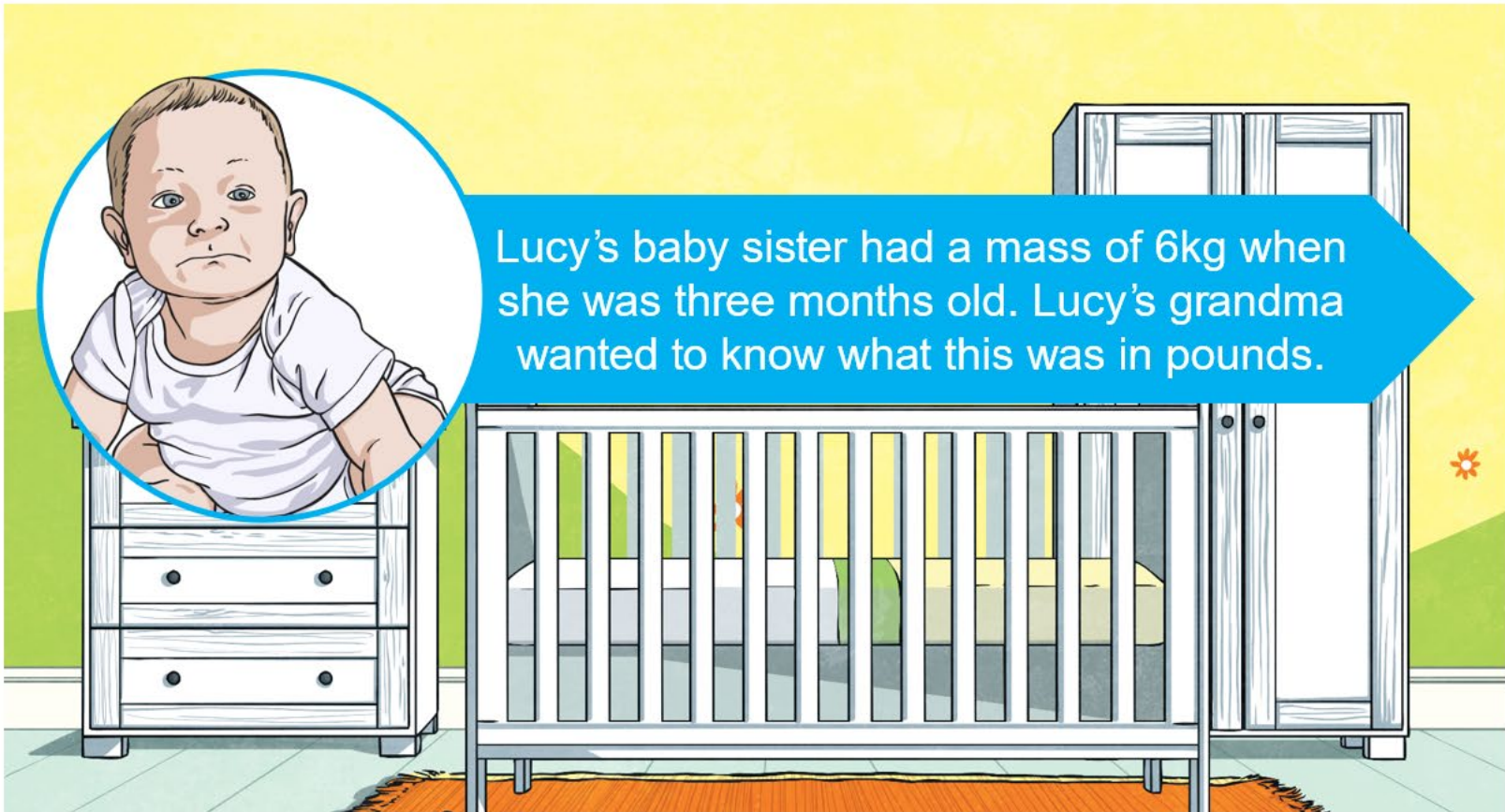
Use these measurements from kilograms to pounds to help Lucy explain this to her grandma.

1kg	2kg	5kg	10kg
2.2lb	4.4lb	11lb	22lb

Pounds, Grams and Kilograms



$$1\text{kg} \approx 2.2\text{lb}$$



Pounds, Grams and Kilograms



$$1\text{kg} \approx 2.2\text{lb}$$

Convert these measurements from kilograms to pounds to help Lucy explain this to her grandma.

1kg	2kg	5kg	10kg
2.2lb			

Pounds, Grams and Kilograms



$$1\text{kg} \approx 2.2\text{lb}$$

Convert these measurements from kilograms to pounds to help Lucy explain this to her grandma.

1kg	2kg	5kg	10kg
2.2lb	4.4lb	11lb	22lb

Mass Problems



1oz \approx 28 grams

1lb \approx 450g

1kg \approx 2.2lb



A kitten has a mass of 20oz.

Its mother has a mass of 2kg.
How much heavier is the mother than her kitten? Give your answer in grams.

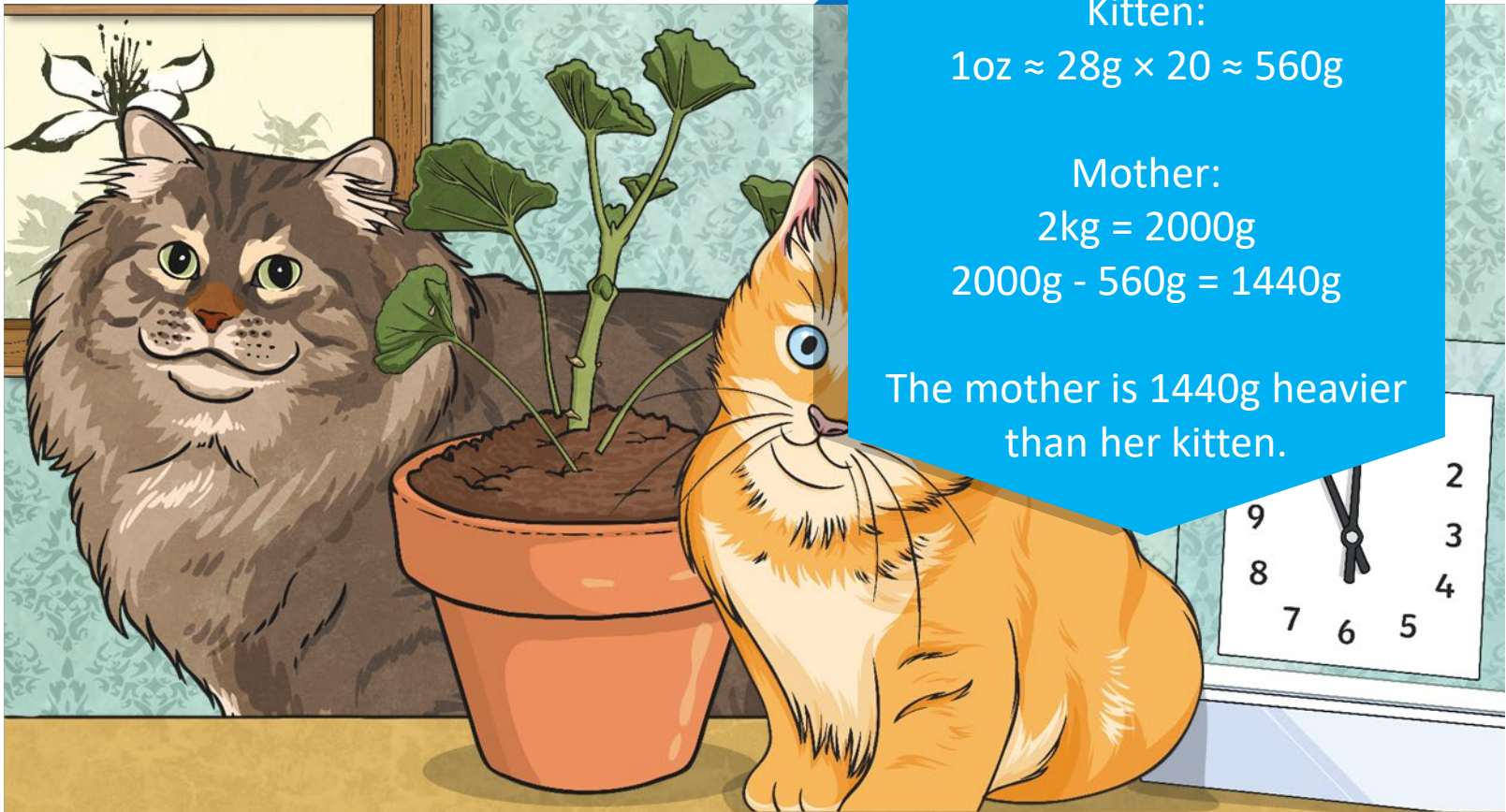
Mass Problems



1oz \approx 28 grams

1lb \approx 450g

1kg \approx 2.2lb



Kitten:

$$1\text{oz} \approx 28\text{g} \times 20 \approx 560\text{g}$$

Mother:

$$2\text{kg} = 2000\text{g}$$

$$2000\text{g} - 560\text{g} = 1440\text{g}$$

The mother is 1440g heavier than her kitten.

Mass Problems



1oz \approx 28 grams

1lb \approx 450g

1kg \approx 2.2lb



When Aran was born,
his mass was 6lbs.

He gained 2.5kg in three months.
What is his mass now?
Give your answer in kilograms.

Mass Problems



1oz \approx 28 grams

1lb \approx 450g

1kg \approx 2.2lb

$$1\text{lb} \approx 450\text{g} \times 6 = 2700\text{g}$$

$$2700\text{g} = 2.7\text{kg}$$

$$2.7\text{kg} + 2.5\text{kg} = 5.2\text{kg}$$

Aran's mass now is 5.2kg.

