

Diving into Mastery - Diving

Adult Guidance with Question Prompts

Children read scales that show measurements in either grams or kilograms and that count up in fives or tens.

Is each scale on this page the same?

How are they different?

Are they measuring in grams or kilograms?

What does each interval represent?

How heavy is the butter?

What can we write to show we are measuring in grams?

What does it mean if the pointer is between two labelled intervals?

Which unit do the scales at the bottom show measurements in?

How do you know?

How can we read the parts of the scale that are not labelled?

What does each mark on the scale represent?

Can you write the masses that the red arrows are pointing to?

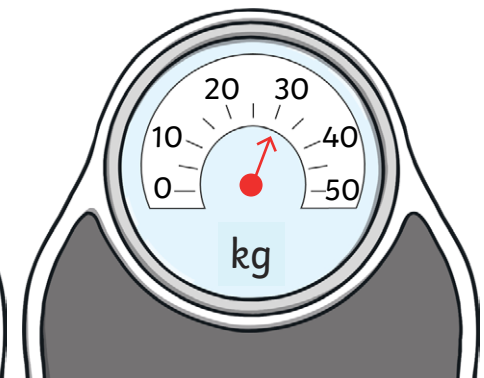
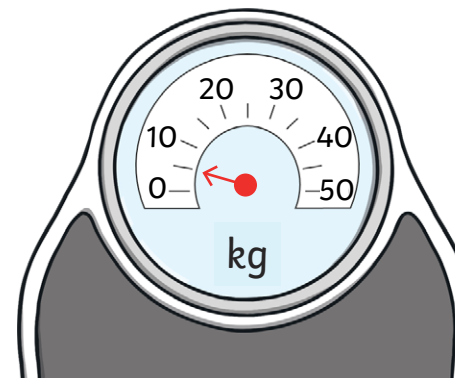
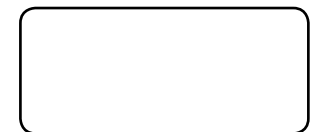
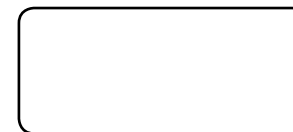
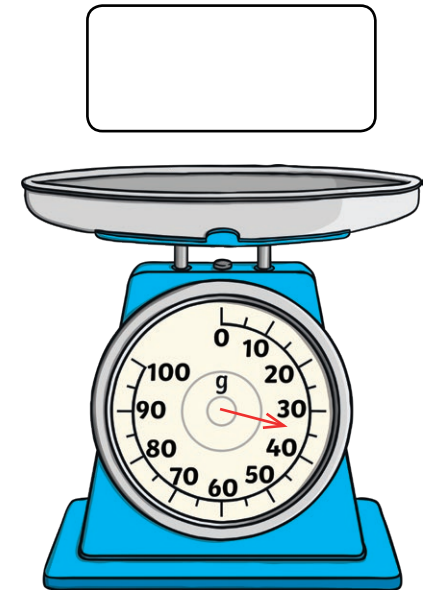
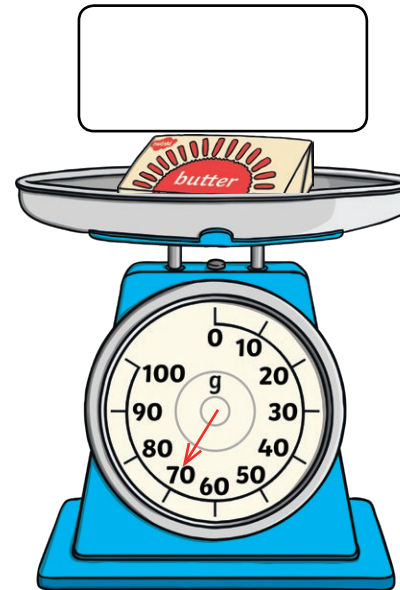
Can you use the correct units?

Measuring Mass in Grams and Kilograms



Write the mass shown on each scale.

Use the correct units.



Diving into Mastery - Deeper

Adult Guidance with Question Prompts

Children reason about the most suitable choice of units for measuring mass. They explain their thinking using mathematical language.

Which of these would you measure in kilograms? Why?

Which would you measure in grams? Why?

Can you think of something that could sensibly be measured in grams or kilograms?







What can you find in the classroom that we would measure in grams? What can you find that we would measure in kilograms?

Measuring Mass in Grams and Kilograms



Would you measure these things in grams or kilograms?

Explain your choice.

rabbit 	butter 
crisps 	orange 
large parcel 	adult 

Can you find five things in the classroom that you could measure in grams and five things that you could measure in kilograms?

Diving into Mastery - Deepest Adult Guidance with Question Prompts

Children solve problems involving weighing in grams and kilograms. They will need 500g weights.

What is the mass of the pink suitcase?

How can we read the parts of the scale that are not labelled?

What does each mark on the scale represent?

Can you calculate the mass of the stripy suitcase?

What is the mass of the three fruits altogether?

How heavy are the apple and plum together?

How can you use that to work out the mass of the lemon?

What do you know about 500g and $\frac{1}{2}$ kg?

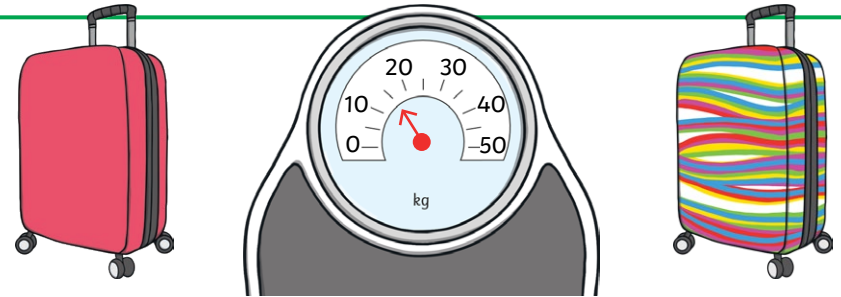
Can you estimate to find objects that are lighter than 500g?

How could holding a 500g weight help you to find objects that are lighter than this?

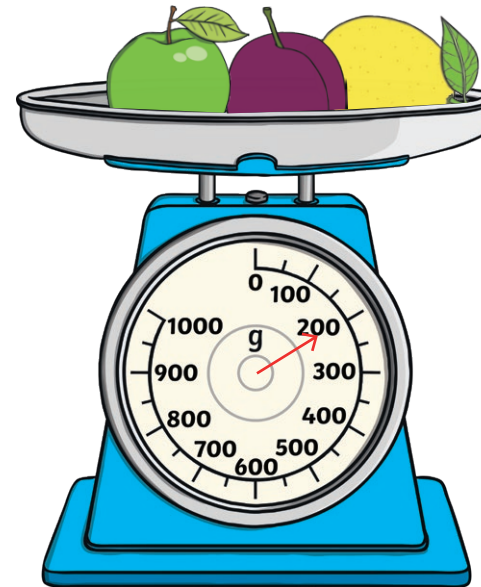
Measuring Mass in Grams and Kilograms



The mass of the pink suitcase is shown on the scale.



The stripy suitcase is 7kg heavier. What is the mass of the stripy suitcase?



The apple has a mass of 90g.

The plum has a mass of 40g.

What is the mass of the lemon?

Using a 500g weight, find 3 things in the classroom that you think feel lighter than $\frac{1}{2}$ kg.
Use a scale to check.