

## Year 1/2 – Spring Block 4 – Weight and Volume – Step 2

### About This Resource:

This PowerPoint has been designed to support your teaching of this small step from the Mixed Age planning. It includes a starter activity suitable for each year group and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack (separate for each year group). Each slide has the year group identified in the bottom right-hand corner. We recommend that you look through this PowerPoint in advance and decide whether to work through all examples provided or a selection of them depending on the needs of your class.

### National Curriculum Objectives:

Mathematics Year 1: (1M1) Compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] mass/weight [for example, heavy/light, heavier than, lighter than] capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Time [for example, quicker, slower, earlier, later]

Mathematics Year 1: (1M2) Measure and begin to record: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds)

Mathematics Year 2: (2M1) Compare and order lengths, mass, volume/capacity and record the results using  $>$ ,  $<$  and  $=$

Mathematics Year 2: (2M2) Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( $^{\circ}\text{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels

More [Year 1 and 2 Weight and Volume](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Step 2

**Year 1: Measure Mass**  
**Year 2: Measure Mass in Grams**

## Introduction

Fill in the blanks using the words on the cards.

The scissors are \_\_\_\_\_ than the apples.

The apples are \_\_\_\_\_ than the scissors.



heavier

lighter

## Introduction

Fill in the blanks using the words on the cards.

The scissors are \_\_\_\_\_ **lighter** \_\_\_\_\_ than the apples.

The apples are \_\_\_\_\_ **heavier** \_\_\_\_\_ than the scissors.

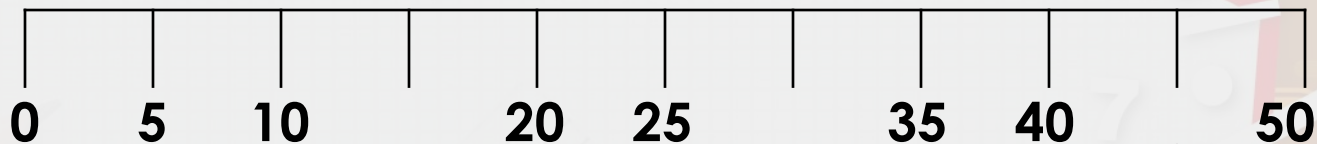
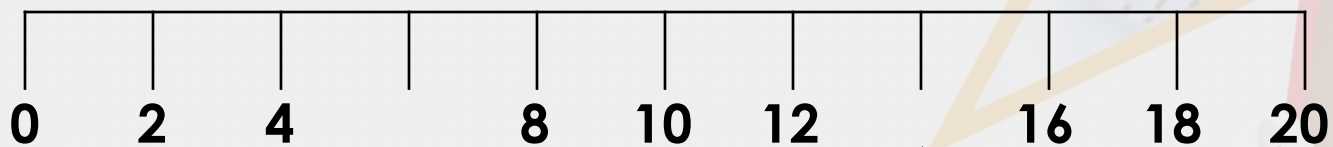
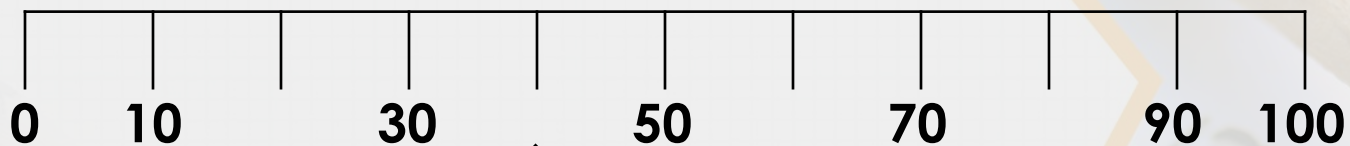


heavier

lighter

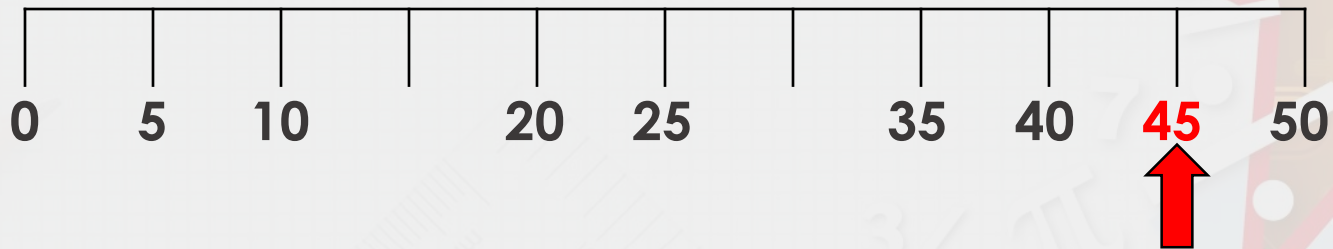
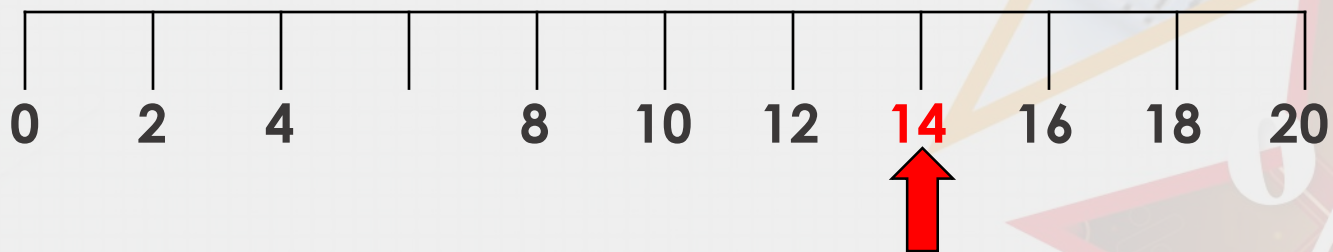
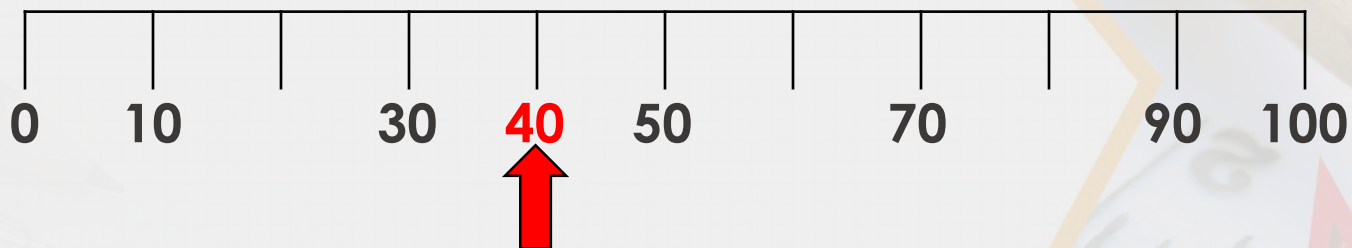
## Introduction

What number each arrow pointing to?



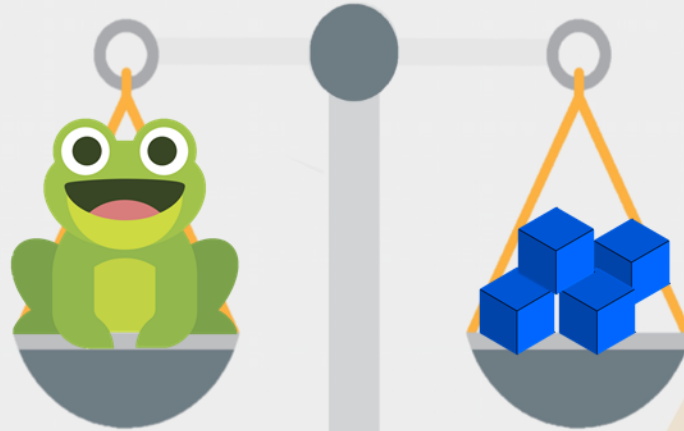
## Introduction

What number each arrow pointing to?



Varied Fluency 1

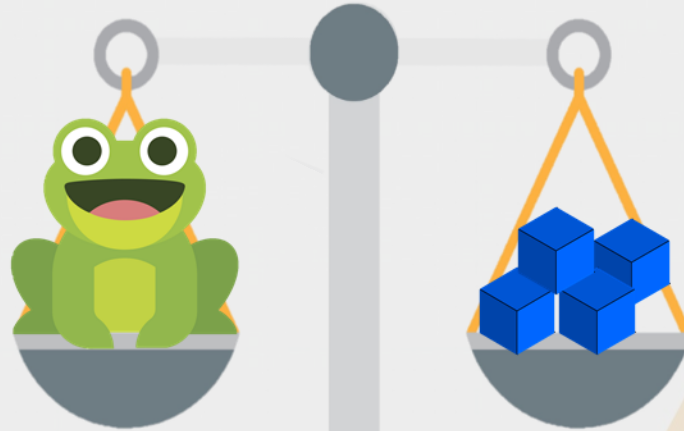
What is the mass of the toy frog?



cubes

Varied Fluency 1

What is the mass of the toy frog?



**4**

cubes



## Varied Fluency 2

**True or false? This box weighs less than 6 buttons.**



Varied Fluency 2

**True or false? This box weighs less than 6 buttons.**



**False, the box weighs more than 6 buttons.**

### Varied Fluency 3

Which object weighs more than the hedgehog?



pumpkin



12 acorns

crayons



8 acorns

toy



10 acorns

### Varied Fluency 3

Which object weighs more than the hedgehog?



pumpkin



12 acorns

crayons



8 acorns

toy



10 acorns

Varied Fluency 1

Order these amounts from smallest to largest.

62g

48g

46g

Varied Fluency 1

Order these amounts from smallest to largest.

62g

48g

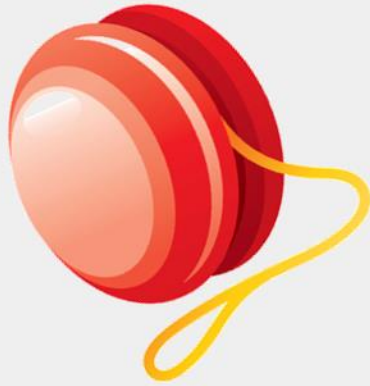
46g

46g, 48g, 62g

Varied Fluency 2

Complete the sentence using 'more' or 'less'.

The duck weighs \_\_\_\_\_ than the yo-yo.



**240g**

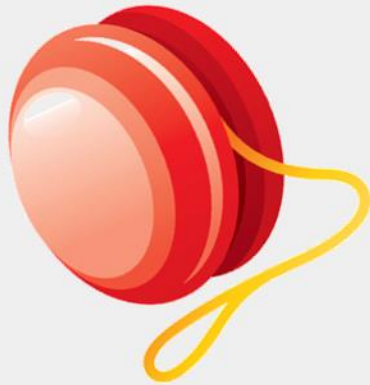


**56g**

Varied Fluency 2

Complete the sentence using 'more' or 'less'.

The duck weighs less than the yo-yo.



**240g**



**56g**



Varied Fluency 3

Circle the object that weighs the most.



108g



362g



424g

Varied Fluency 3

Circle the object that weighs the most.



108g



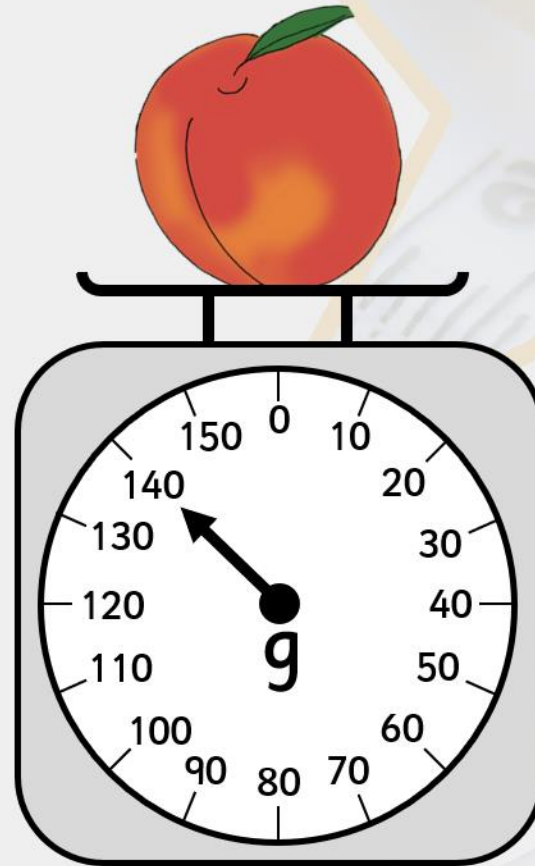
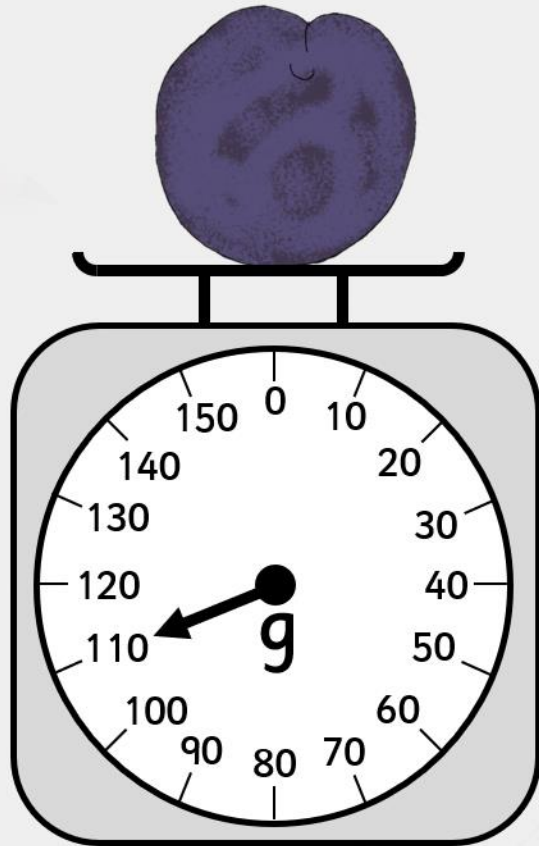
362g



424g

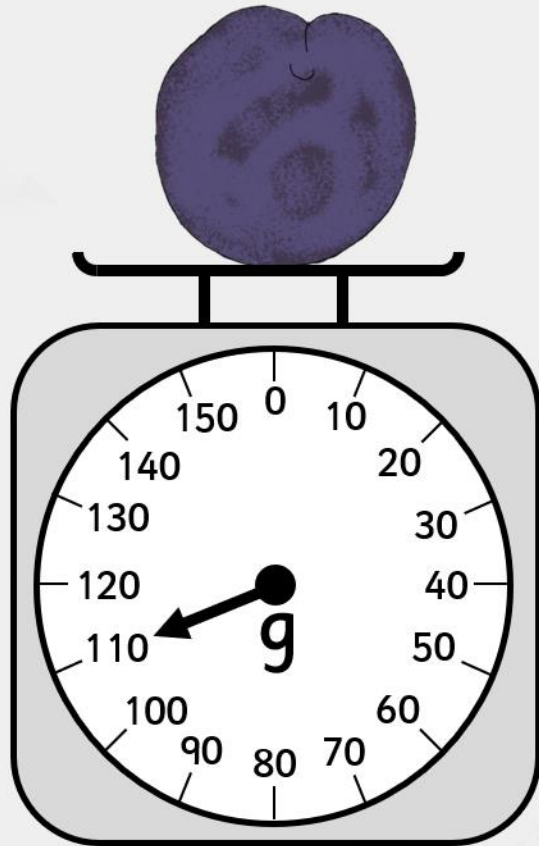
## Varied Fluency 4

How much do these items weigh?

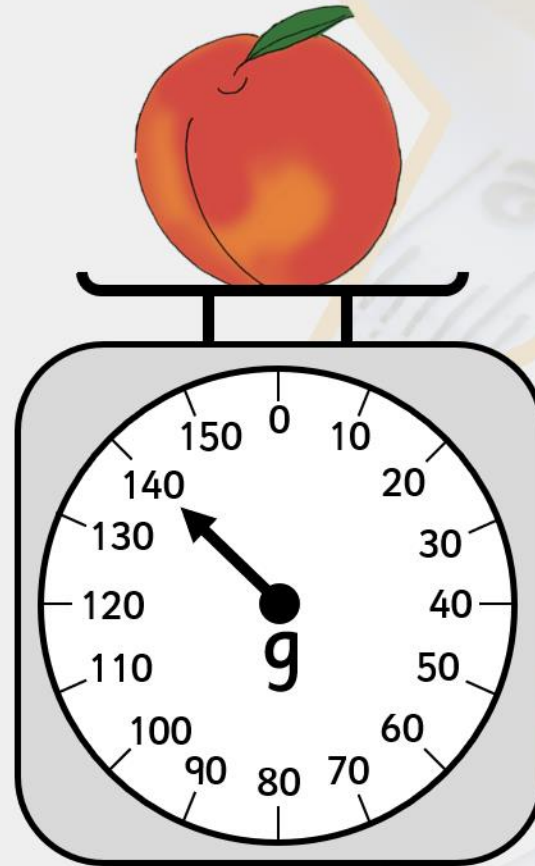


## Varied Fluency 4

How much do these items weigh?



**110g**



**140g**

## Problem Solving 1

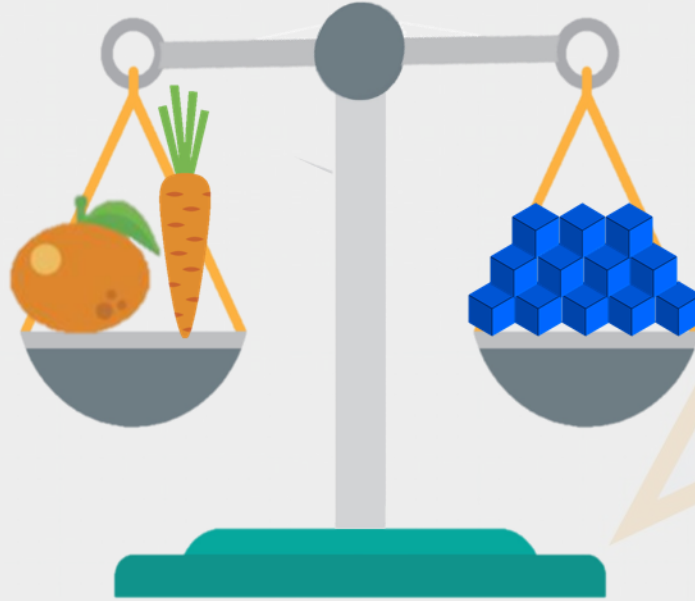
**The orange weighs 7 blocks and the carrot weighs 5 blocks.**



**Draw the blocks to balance the scale.**

## Problem Solving 1

The orange weighs 7 blocks and the carrot weighs 5 blocks.



Draw the blocks to balance the scale.

**12 blocks should be drawn on the scale.**

## Problem Solving 2

The plum and the kiwi weigh 10 jewels.



Find 3 possible combinations for the mass of the plum and the kiwi.

## Problem Solving 2

The plum and the kiwi weigh 10 jewels.



Find 3 possible combinations for the mass of the plum and the kiwi.

Various answers, for example: plum 4 jewels, kiwi 6 jewels, or plum 3 jewels, kiwi 7 jewels, or plum 9 jewels, kiwi 1 jewel



## Reasoning 1

Cheng is weighing objects. He says,



I think 1 more acorn will balance the scale.

Is he correct? Explain your answer.

## Reasoning 1

Cheng is weighing objects. He says,



I think 1 more acorn will balance the scale.

Is he correct? Explain your answer.

No, he is not correct because...

## Reasoning 1

Cheng is weighing objects. He says,



I think 1 more acorn will balance the scale.

Is he correct? Explain your answer.

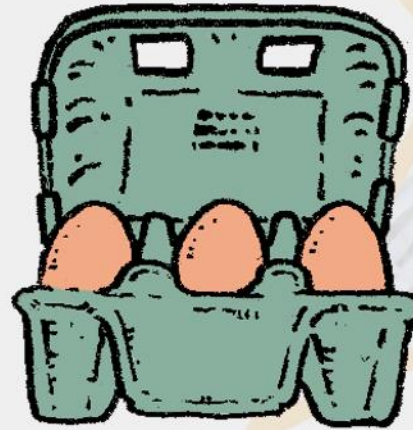
**No, he is not correct because the acorns are already heavier than the teddy. He would need to remove acorns to balance the scale.**

Problem Solving 1

The flour weighs 30g more than the eggs.



?



54g

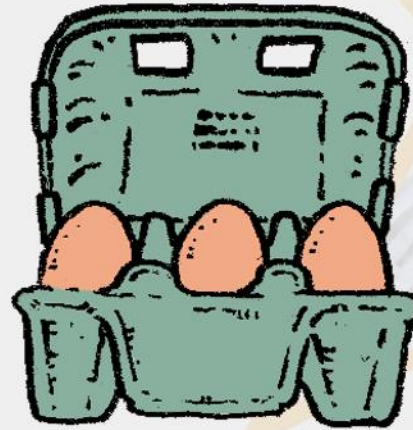
How much does the flour weigh?

## Problem Solving 1

The flour weighs 30g more than the eggs.



84g

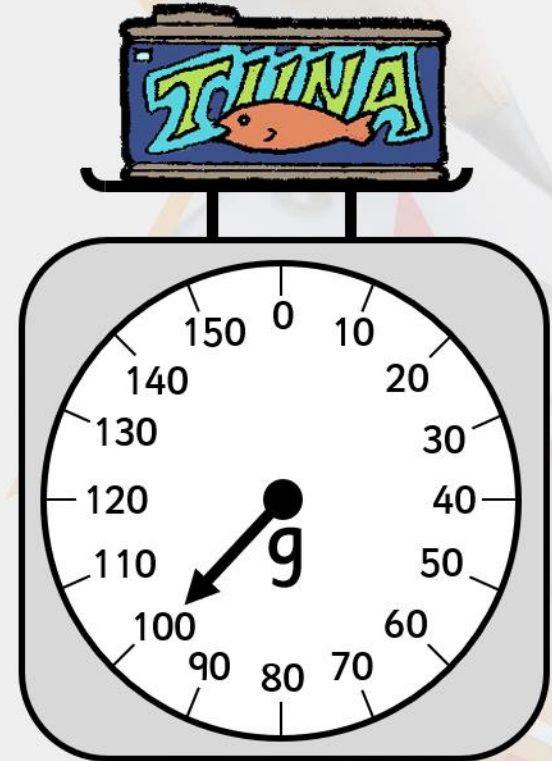
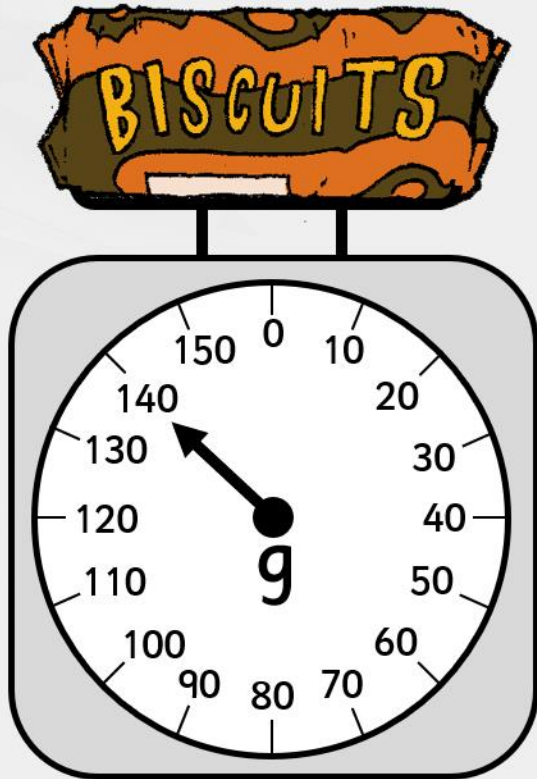


54g

How much does the flour weigh?

## Problem Solving 2

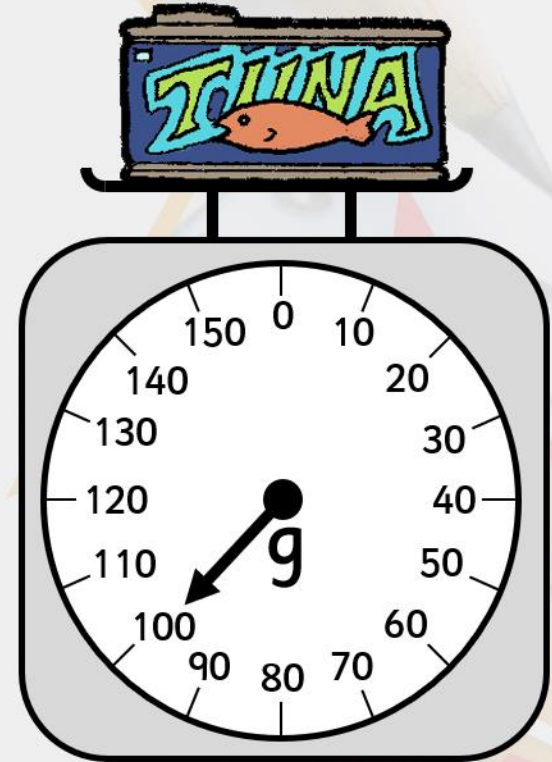
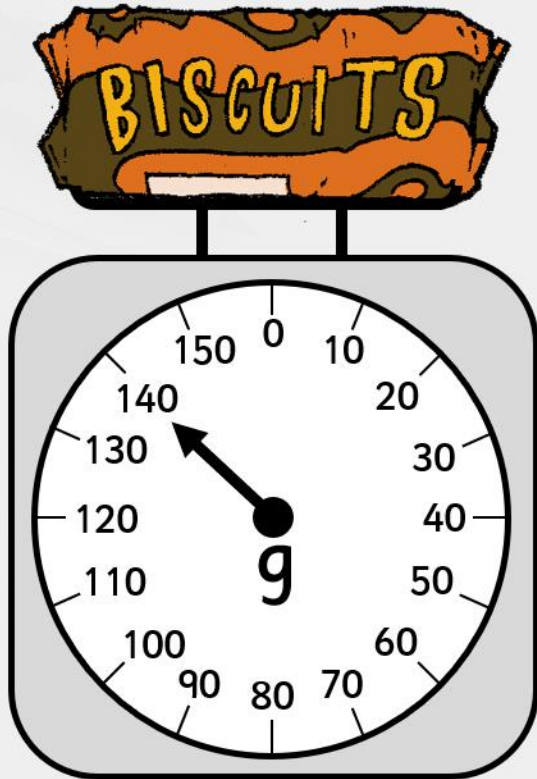
The beans weigh less than the biscuits but more than the tuna.



How much could the beans weigh?

## Problem Solving 2

The beans weigh less than the biscuits but more than the tuna.



How much could the beans weigh?

**Any amount between 101g and 139g.**

Reasoning 1

Annie's toy weighs 96g and Olly's toy weighs 86g.



Annie

My toy  
weighs 10g  
more than  
yours.

My toy  
weighs 10g  
more than  
yours.



Olly

Who do you agree with? Why?



Reasoning 1

Annie's toy weighs 96g and Olly's toy weighs 86g.



Annie

My toy  
weighs 10g  
more than  
yours.

My toy  
weighs 10g  
more than  
yours.



Olly

Who do you agree with? Why?

I agree with Annie because...

Reasoning 1

Annie's toy weighs 96g and Olly's toy weighs 86g.



Annie

My toy weighs 10g more than yours.

My toy weighs 10g more than yours.



Olly

Who do you agree with? Why?

I agree with Annie because 96g is 10 more than 86g.