

1. Watch the video and try making your own balance scale <https://www.youtube.com/watch?v=FRTbekqsuZ8>
2. Read about how we can measure the mass of objects.
3. Use your balance scale to measure the mass of 4 of your toys, using other objects like Lego bricks, grapes, buttons, pencils, marbles
4. Weigh each toy again using a different object to see if you need the same amount, more or less.

Model:

1.



<https://www.youtube.com/watch?v=FRTbekqsuZ8>

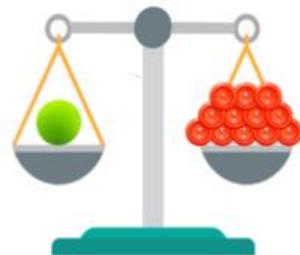
3.

Using your home-made balance scale, choose 4 toys (or objects) in your home to weigh.

Use other objects to find out how much the toy weighs – stop adding objects when the scale is **equal (balanced)**.

E.g. I measured the ball using buttons.
I added buttons to the scale until the ball was equal in mass to the buttons.

The ball weighs the same as 12 buttons.



2.

How can we measure the mass of objects?

We can use lots of different things to measure the mass of objects.

This lemon weighs the same as 5 cubes.

What would happen if we took away a cube?
The lemon would be **heavier** and go down.



What would happen if we added another cube?
The cubes would be **heavier** and go down.

4.

Now **choose something new** to measure each of your toys with.



E.g. This time, I will weigh my ball using raisins.



Do you think I will need the same amount of raisins as buttons?

Canonbury Home Learning
Year 2/3 Maths

Lesson 2 – 16.06.2020

LO: To measure mass

Success Criteria:

1. Watch the video about measuring mass <https://www.bbc.co.uk/bitesize/clips/z7w7tfr>
2. Read about how we measure the mass of objects
3. **Task 1:** Play Mostly Postie game. Then read the scales (in grams) to find out the weight of the objects and fill in any missing numbers on the scale.
4. **Task 2:** Play Mostly Postie game. Then read the scales (in kg) to find out the weight of the objects and fill in any missing numbers on the scale.

Model:

1.



<https://www.bbc.co.uk/bitesize/clips/z7w7tfr>

2.

How do we measure the mass of objects?

- a) Look at the scale and see what the numbers go up in each time. They might go up in 2s, 5s, 10s, sometimes hundreds!
- b) Check if the scale is in grams (g) or kilograms (kg)
- c) Fill in any missing numbers.
- d) Look at the number the arrow is pointing to. It is half way between the 4 and the 6.

So the mass of the feather is 5g.



3.

Mostly Postie
A read the scales game

kg and half kg (Answers can be given in grams, e.g. 1000g)

g answers in steps of 100g (e.g. 100g, 200g or 300g)

g answers in steps of 50g (e.g. 50g, 250g or 150g)

g answers in steps of 10g (e.g. 70g, 50g or 110g)

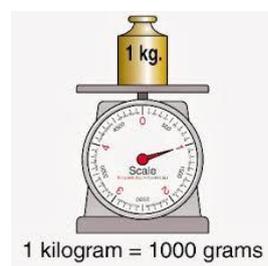
g answers in steps of 25g (Answers can be given in grams, e.g. 1kg=1000g)

kg answers in steps of 100g (Some, there's no decimals for 125kg)

Before Task 1

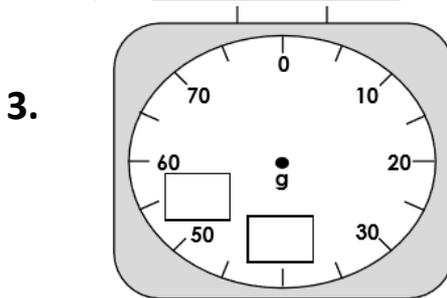
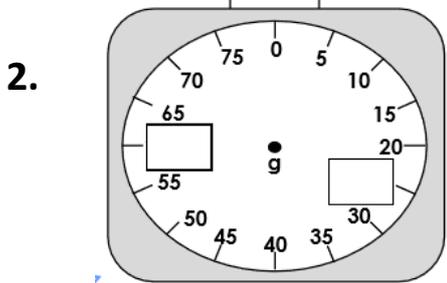
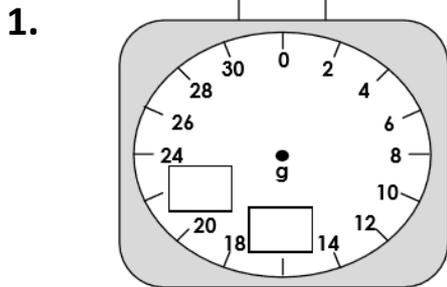
Before Task 2

<https://www.ictgames.com/mobilePage/mostlyPostie/index.html>

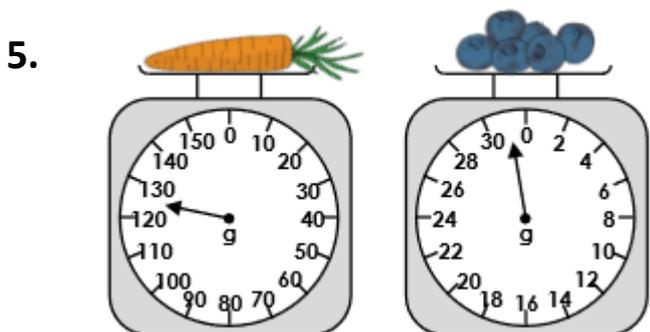
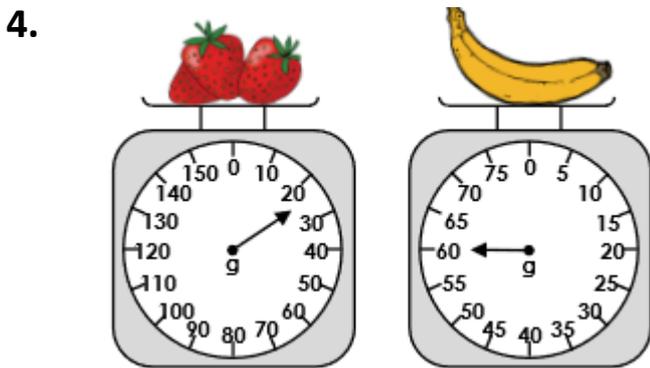


Task 1

Practice Complete the missing numbers on the scale:

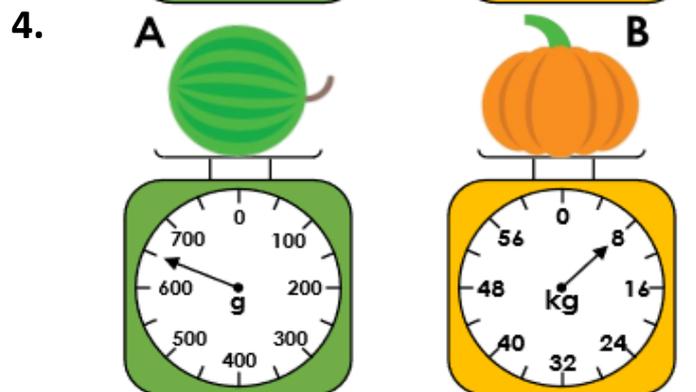
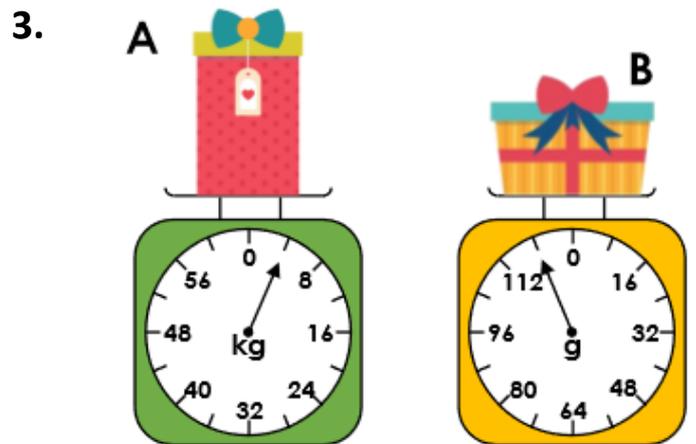
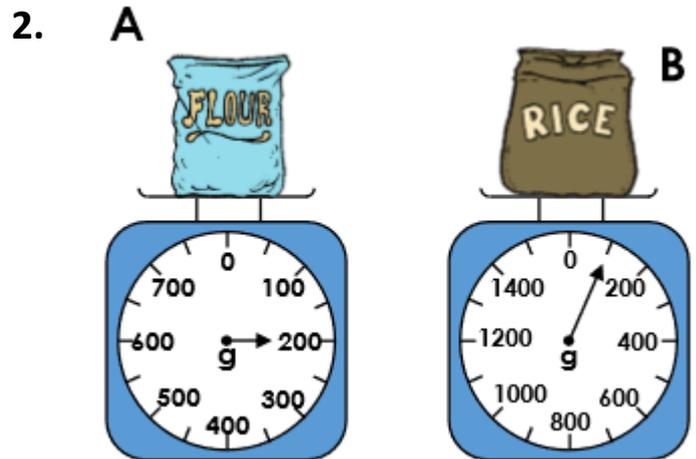
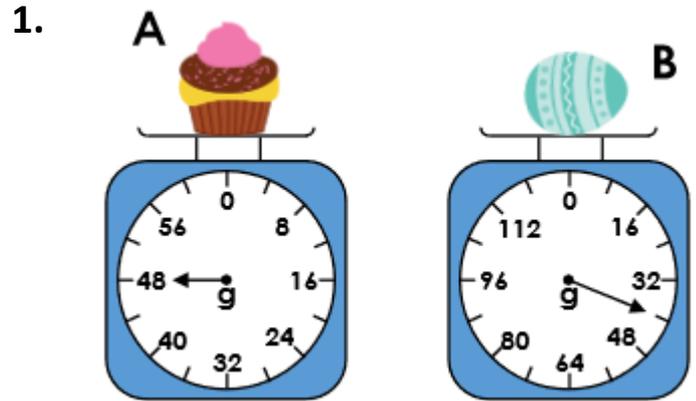


How much do these items weigh?



Task 2

Practice
How much does each object weigh?

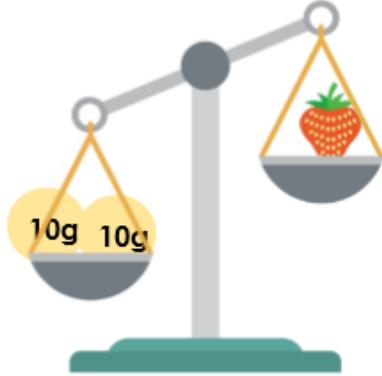


Task 3

Reasoning

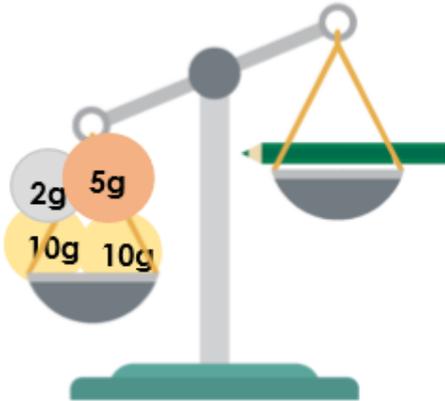
Explain your answers.

3a. Amy thinks the strawberry could weigh 25g. Is she correct?



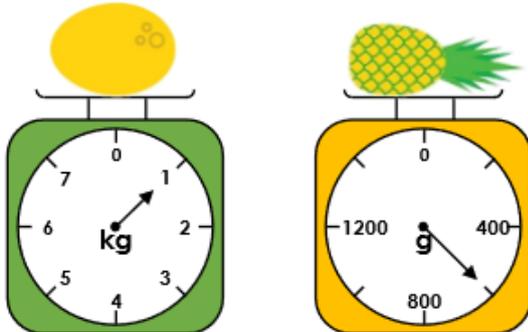
Explain your answer.

6a. Scott thinks the pencil could weigh 25g. Is he correct?



Explain your answer.

6b. Sean is weighing different items. He says the melon is lighter because the arrow on the scale is closer to zero.

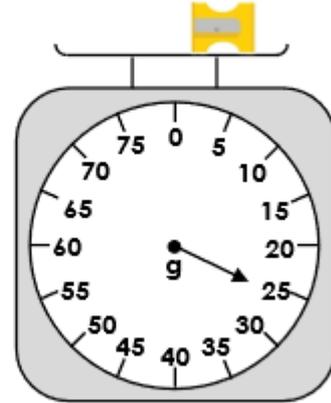


Is he correct? Explain how you know.

Task 4

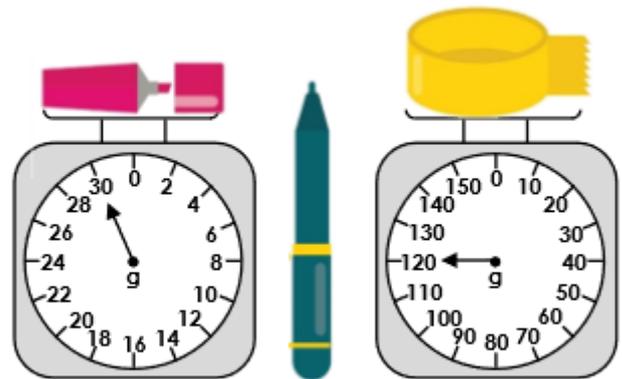
Problem solving

4b. A rubber weighs 20g more than the pencil sharpener below.



How much does the rubber weigh?

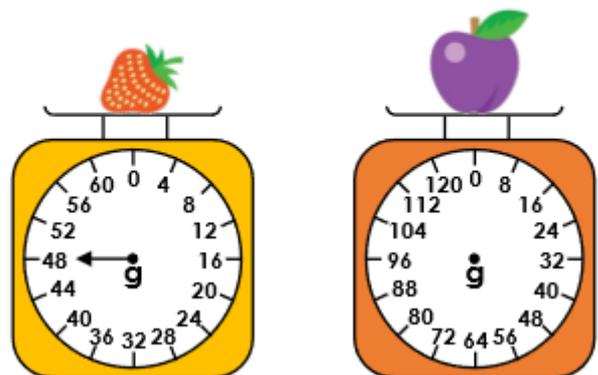
5b. The pen weighs more than the marker but less than the tape.



How much could the pen weigh?

★ Give 3 possible answers.

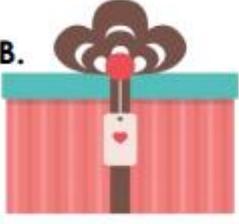
4a. If two strawberries weigh the same as one plum, draw an arrow on the scale to show the weight of the plum.



Further Challenge!

2. Combine any number of objects to make the mass shown on each set of scales. Investigate how many ways you could combine the parcels to fit the scales. You can use each mass as many times as you wish.

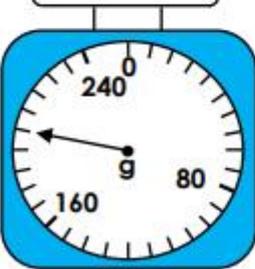
A.  150g

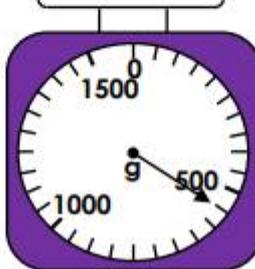
B.  500g

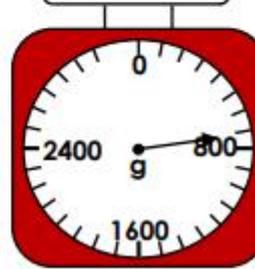
C.  300g

D.  50g

E.  100g

 Scale 1

 Scale 2

 Scale 3