

5th class weight

25/05/20-29/05/20

Weight vocabulary

Balance

Kilograms

Grams

Spring balance

balance

Weight bridge

weighing scales

Kitchen scales

bathroom scales

Grams/Kilograms

- **Grams and kilograms are both units of measurement used in weight.**
- **We mark grams using a small g. Eg. Add 25_g of sugar to the recipe**
- **We mark kilograms using kg. Eg. I weigh 50 kg.**
- **There are 1000_g in a Kg.**
- **Therefore we use Kg to weigh heavier items and g to weigh lighter items.**

Instruments of weight.

Bathroom scales

The bathroom scales is an instrument of weight that can be found in most houses and is commonly used to weigh people. It usually measures in Kg and g.



Kitchen scales

- The Kitchen scales is used frequently in baking and cooking.
- Usually when baking or cooking the weight is grams and therefore that is the most common unit of measurement found on the kitchen scales.



Spring balance

- A spring balance uses tension and a spring to weigh an item.
- You Attach the item you wish to weigh to the hook.
- This pulls down the spring in the cylindrical body of the instrument.
- You can then read the weight measure on the scales.
- You may have seen the spring balance used to measure your bags before you go to the airport on holidays.



- A spring balance weighs in both Kg and g.

Balance

- **A balance is an instrument of weight that compares 2 objects so you can judge the weight of them.**
- **You place an object in each tray. Whichever tray moves down towards the ground contains the heavier object.**
- **It works much the same as a see-saw.**



Weight-bridge

- A weight bridge is known as a platform scales. This means that you must drive or walk onto it to get a weight reading.
- These can be used to measure the weight of trucks or cars. It's also used to measure the weight of animals if they are being sold at a mart.
- This is nearly always used to weigh heavier objects that you couldn't lift onto a scales and is therefore nearly always measured in Kg.



Activity 1.

What are we weighing	Instrument	Unit of measure (kg/g/both)
Ingredients for bread		
Mr. McGowan		
Bags of shopping		
Farmer weighing his cattle		
Banana's in a supermarket		
A lorry getting onto a ferry		
Conor McGregor before a fight		
A newspaper		
A dog		

Reading a scales.

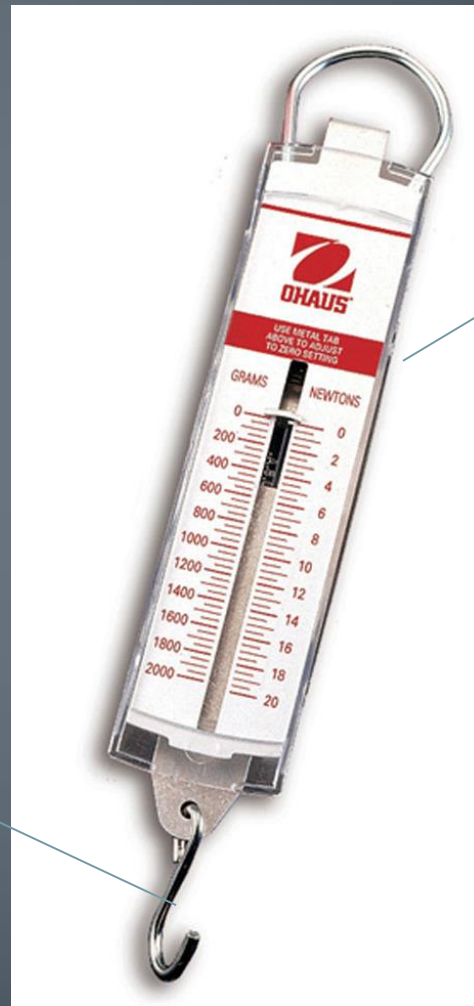
Platform to put object
being weighed on



Read the
weight
off the
face of
the
scales

The scales

Reading instruments

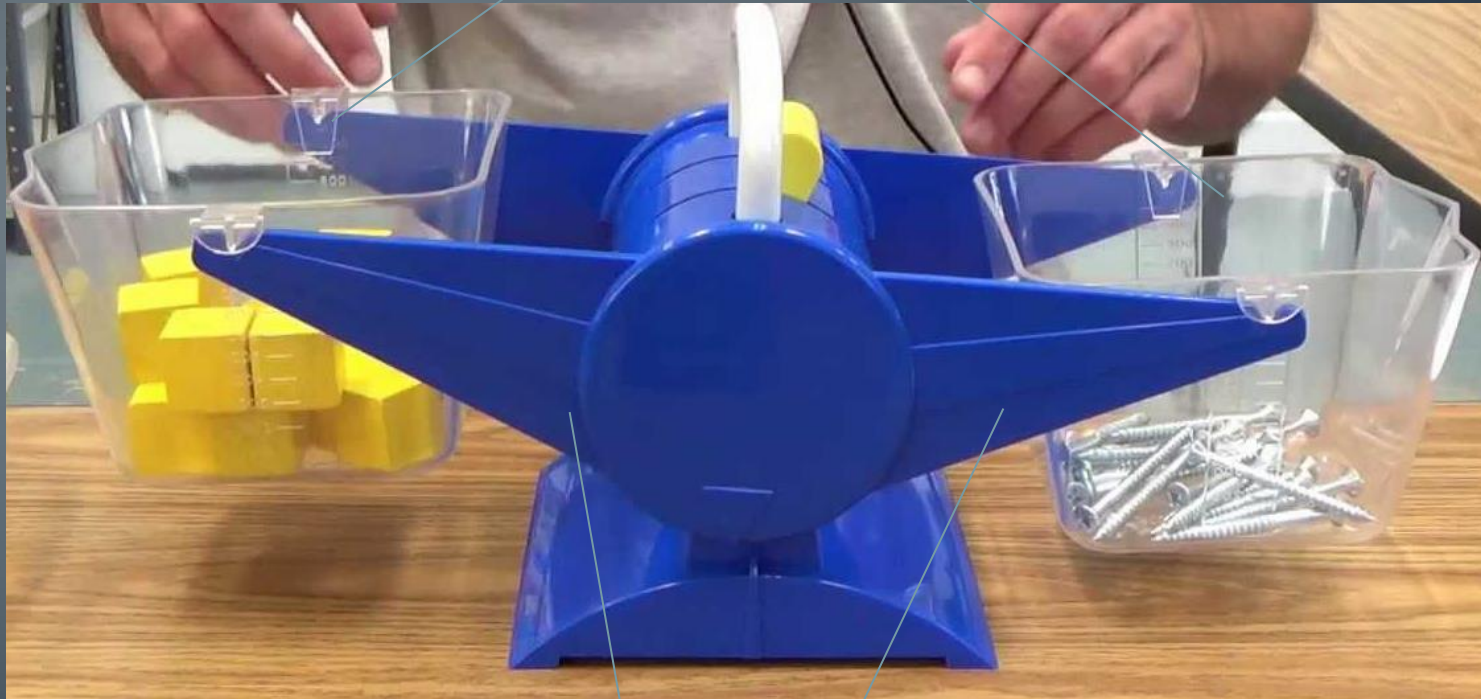


Hook to attach
item being
weighed to.

Scales to read
in both grams
and kilograms.

Reading the instruments

Place objects to be weighed in the two containers



The heavier object will cause an imbalance on the scales forcing one side to go down and the other up

Activity 2. Make your own balance

- **You will need:**

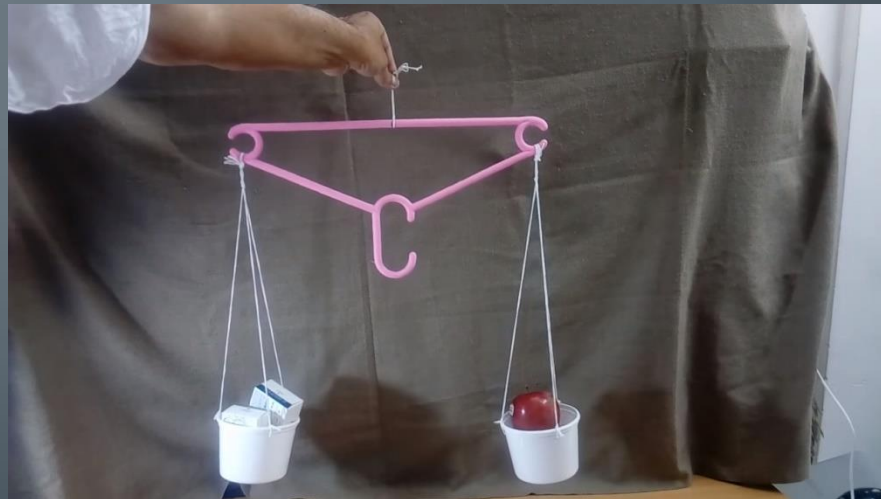
1. **A clothes hanger.**
2. **2 pieces of string the same length.**
3. **2 plastic or paper cups.**

How to make it:

1. **Make 2 holes in both the plastic cups directly across from each other.**
2. **Cut two pieces of string/twine/wool (or whatever is handiest) to about 30cm long. Thread it through the 2 holes and tie a knot at the top of it.**

Activity 2. Make your own balance contd.

3. Get a clothes hanger and tie your two containers to either side of it.
4. Put the hook of the clothes hanger onto a door handle or a hook for hanging a picture on a wall.
5. Find small objects around your house to weigh.
6. Estimate by holding in you hand which one you think will weigh more.
7. Put one object in each of the containers and record your answers.



Activity 3. Reading weight off a scale.

Planet Maths. P.
153 exercise (A)

A How heavy? Look at the scales. Write your answers in grams.

1.



2.



3.



4.



Kilograms and gram.

- As previously mentioned there are a thousand grams in a kilogram.
- This generally means up to 1000g will be weighed using grams.
- After 1000g we begin to use Kg and g.

For example:

10 apples weigh 1,500g. This can be written in a tidier form:

1kg 500g.

It can also be written in decimal form:

1.5kg

And also in fraction form:

1 $\frac{1}{2}$ Kg.

Further examples









1. $1,250\text{g} = 1\text{kg } 250\text{g}$, 1.25kg and $1 \frac{1}{4}\text{Kg}$.
2. $1,600\text{g} = 1\text{kg } 600\text{g}$, 1.6kg and $1 \frac{3}{5}\text{kg}$.
3. $1,400\text{g} = 1\text{kg } 400\text{g}$, 1.4kg and $1 \frac{2}{5}\text{kg}$.

Activity:

Convert the following into kg and g, decimal form and fraction form:

1. $1,700\text{g}$
2. $1,650\text{g}$
3. $1,100\text{g}$
4. $2,500\text{g}$
5. 600g
6. $4,400\text{g}$
7. $8,333\text{g}$
8. $9,750\text{g}$
9. 50g
10. $10,000\text{g}$.

B Express each of these weights as kilograms.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 

Postage

- Weight is very regularly used in postage. When posting a letter they weigh it to calculate how much it will cost you to post the item. It might explain delivery costs on all that online shopping that's being done at the moment.
- Exercise: Page 155 in your planet maths has an excellent activity in which you are asked to calculate the cost of posting various parcels.
- In part A you are asked to calculate the cost if you are sending parcels by regular mail to different parts of the world.
- In part B however they introduce express postage. This costs 5 times more but gets it there much quicker.

*view next slide for page of planet maths.

A Postal charges

THE POST



















Weights Guide

Letter/Postcard: <100g
 Large Envelope: 100g – 500g
 Packet: 500g – 2kg
 Parcel: 2kg – 20kg

Postal Zone 1: IRELAND	Postal Zone 2: GREAT BRITAIN	Postal Zone 3: EUROPE	Postal Zone 4: REST OF WORLD
Standard Post:	Standard Post:	Standard Post:	Standard Post:
Letter/Postcard: €0.55	Letter/Postcard: €0.82	Letter/Postcard: €0.82	Letter/Postcard: €0.82
Large Envelope: €1.90	Large Envelope: €4.25	Large Envelope: €4.25	Large Envelope: €4.85
Packet: €7.50	Packet: €10.75	Packet: €10.75	Packet: €30.00
Parcel: up to 5kg €14.00 (€1.00 per additional kg)	Parcel: up to 5kg €40.00 (€1.00 per additional kg)	Parcel: up to 5kg €55.00 (€3.00 per additional kg)	Parcel: up to 5kg €55.00 (€5.00 per additional kg)
Registered Post: Price above x 5	Registered Post: Price above x 5	Registered Post: Price above x 5	Registered Post: Price above x 5
Express Post: < 2kg: price above x 5 > 2kg: €20.10			

Look at the table above. What is the total cost of posting the following objects from Athlone to these places? What change would there be from €700? All parcels weigh less than 5kg.

 = letter
  = large envelope
  = packet
  = parcel

Dublin	   	Total €___
Manchester	   	Total €___
Warsaw	   	Total €___
New York	   	Total €___

B Now calculate the total cost of sending these items. **Reg = Registered, Exp = Express**

Nenagh	Liverpool	Vilnius	Cairo	Rome	Mexico City
Weights	Weights	Weights	Weights	Weights	Weights
1 × 5g Reg	2 × 50g	5 × 10g	1 × 50g Reg	1 × 0.005kg	2 × 0.01kg
1 × 150g Exp	3 × 250g	2 × 400g	1 × 0.8kg	2 × 0.09kg	3 × 0.65kg
2 × 1kg 500g	2 × 2kg	1 × 1.7kg Reg	2 × 8kg	1 × $3\frac{1}{4}$ kg Reg	1 × 6kg Reg
1 × 8kg Exp	1 × 10kg	1 × 6kg			
€	€	€	€	€	€

