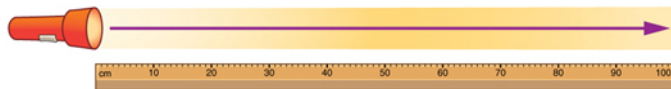




# Weight and Measurement Maths



Light travels a distance of 1 meter  
in  $\frac{1}{299,792,458}$  seconds



# Measurement - Length

We use different **UNITS** of measure when we are measuring the length or height of an object.

These are units of measure below:

**Millimetres (mm)**

**Centimetres (cm)**

**Metres (m)**

**Kilometres (km)**

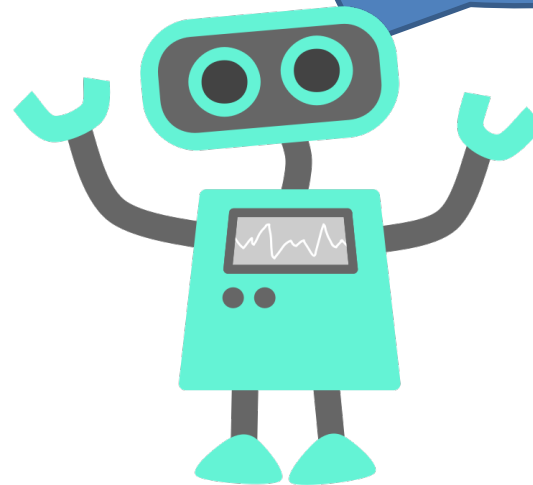
We would measure an insect using millimetres (mm) because the insect is very small.

We would measure a chair using centimetres (cm) because the chair is bigger than an insect.

We would measure a car's length using metres (m) because a car is bigger than a chair.

We would measure the distance (length) from your house to school using kilometres (km).

- There are 10mm in 1cm
- There are 100cm in 1m
- There are 1000m in 1km



## Whole class task.....

Think about items that we can measure and what we use to measure them.  
Can you list below different items that can be measured and how you would measure them.

Example: Item = a piece of paper      Measure = in centimetres.

## Whole class task.....

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## Whole class task.....

Think about items that we can measure and what we use to measure them.  
Can you list below different items that can be measured and how you would measure them.

Example: Item = a piece of paper      Measure = in centimetres.

[illegible]

## **Task – Group 1A**

**I would like you to measure 4 different things around the house. Use a ruler or tape measure and write down the object and what it measures.**

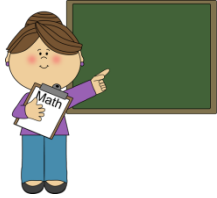
Example:  
OBJECT – a book  
MEASURES – 18cm

## **Task – Group 1B and 2**

**I would like you to measure 6 items around the house. Use a ruler or tape measure and write down the object and what it measures.**

Example:  
OBJECT – a photo frame  
MEASURES – 30cm

# TASK FOR GROUPS 1A, 1B AND 2



Your teacher



Your garden



Your car



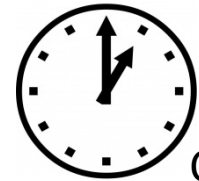
A book



Pencil

What UNIT of measure would you use to measure these items?  
mm, cm, m,

Write down each item and next to it, write what unit of measure you would use to measure it.



Clock



Donut



School bus



Spider



Beetle

## Task – Group 3

Measure the following items that you will find in or around your home and decide if they are better being measured in centimetres (cm) or metres (m) or a combination of both. Record your findings below.

The length of your bedroom =

The length of your garden =

The length of your car =

The height of your parent/carer =

Your height =

The length of your television =

The height of your front door =

## Task – Group 4

Measure the following items that you will find in or around your home and decide if they are better being measured in centimetres (cm) or metres (m) or a combination of both.

Record your findings below. You are adding or subtracting two different lengths/heights.

The length of your bedroom + the length of your kitchen =

The length of your garden + the length of your bedroom window =

The length of your car + the height of the car =

The height of your parent/carer + the height of your brother/sister =

Your height + the length of your foot =

The length of your television – the length of your leg =

The height of your front door – the length of a tea towel =

## Task for Group 3 and 4

Using a tape measure, a pad and pencil, please measure all of the rooms in your house.

Once you have done this, I would like you to draw a floor plan of your house with the measurements for each room inside. There is an example below for you to look at.





# Weight - Mass

We use different **UNITS** of measure when we are measuring the weight of something.

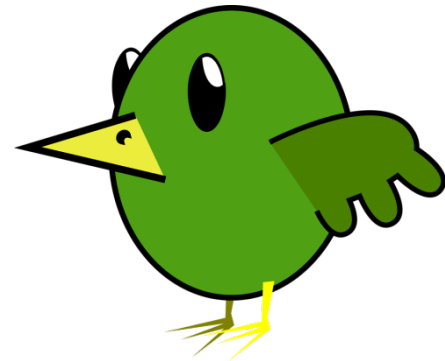
When we measure MASS we use the UNITS of measure, such as grams (g) and kilograms (kg).

You would measure smaller amounts of weight or mass in grams (g) and larger amounts in kilograms (kg).

We would say 'The mass of a ten pence piece can be measured using grams'.  
'The mass of a sofa can be measured using kilograms'.

**WEIGHT** can also be known as **MASS**.

**Grams = g**  
**Kilograms = kg**



# Measuring Length and Mass

**<** This symbol means 'less than'. It can also mean lighter than, smaller than.

When we are discussing mass we have KEY VOCAB that we can use.

**>** This symbol means 'more than'. It can also mean heavier than, bigger than.

**=** This symbol means 'the same as'. It can also mean equal to.

## Whole class task.....

Think about items that we can measure and what unit of measure we would use.  
Can you list below different items that can be measured using grams and kilograms.

Example: Item = an apple      Measure = in grams.

## Whole class task.....

Think about items that we can measure and what unit of measure we would use.  
Can you list below different items that can be measured using grams and kilograms.

Example: Item = an apple      Measure = in grams.

## Whole class task.....

Think about items that we can measure and what unit of measure we would use.  
Can you list below different items that can be measured using grams and kilograms.

Example: Item = an apple      Measure = in grams.

[illegible]

## Task – Group 1A

Fill in the correct missing word. You can chose from; **lighter than, the same as or heavier than.**

1. An apple is .....a chair.
2. A pencil is ..... a spider.
3. A plate is ..... a bowl.
4. A door is ..... a car.
5. A dog is ..... a man.

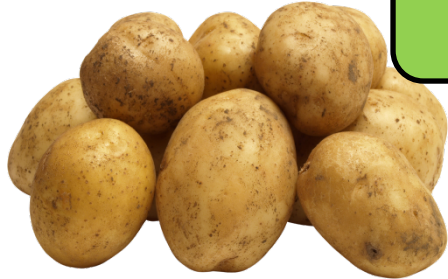
## Task – Group 1B and 2

Fill in the correct missing word. You can chose from; **lighter than, the same as or heavier than.**

1. An apple is .....a chair.
2. A pencil is ..... a spider.
3. A plate is ..... a bowl.
4. A door is ..... a car.
5. A dog is ..... a man.

**Can you order the items above from lightest to heaviest.**

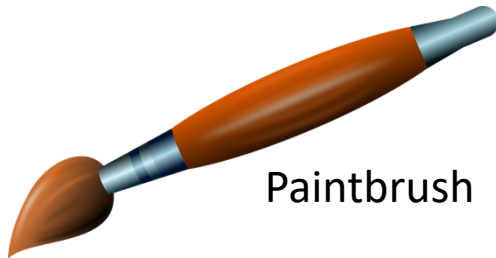
# Task for Group 1A, 1B and 2



Potatoes



Car



Paintbrush



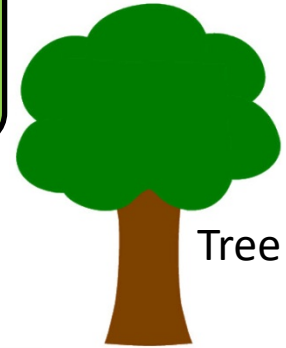
Mouse



Book



Bread



Tree



Man



Donut



Elephant

What unit of measure  
would you use for  
these items? **Grams (g)**  
or **Kilograms(kg)**?  
Write down each item  
and what unit you  
would use to measure  
them.

**Group 1B and 2 –  
order the mass of  
each shape, lightest to  
heaviest.**

## Task for Group 3 and 4

I would like you to find a recipe on line for buns or use the one below. I would like you to follow the recipe independently and measure out the mass of the ingredients using grams.

Buns (makes 20-24 fairy cakes)

110g butter or margarine  
110g caster sugar  
2 eggs  
1 tsp vanilla extract  
110g self raising flour  
1-2tbsp milk

- Mix all of the ingredients together and then put into the bun cakes.
- Place in the oven (180 degrees) and bake for 8-10 minutes.

Once you have completed the Mass task – answer the following questions.

1. Can you measure mass (weight) in grams and kilograms?
2. Do you know how many grams are in a kilogram?
3. Do you think it is easy measuring mass?
4. What other ways could you measure mass?

# Measuring Capacity

Example of **capacity/volume**;

- How many people can fit into a room?
- The amount of water a bucket can hold
- How many rabbits can fit into a cage
- How much juice a glass can hold

We could say;

‘The **capacity** of the party room is 200 people’.

‘The **capacity or volume** of the bucket is 5 litres’.

‘The **capacity** of the cage is 5 rabbits’.

‘The **capacity or volume** of the glass is 250 millilitres’.

What is **capacity**?

Capacity also means **volume**. It means the amount that something can hold.

We have KEY VOCAB for capacity/volume of something;

**Millilitres (ml)**

**Litres (l)**

# **Task for capacity/volume.....**

## **Group 1A, 1B and 2**

Try and find 5-6 different sized containers at home and a measuring jug (ask your parents/carers to help). I would like you to fill the containers up and then measure the volume/capacity of water that each container can hold. Please record your results.

## **Group 3 and 4**

Try and find 5-6 different sized containers at home and a measuring jug (ask your parents/carers to help). I would like you to fill the containers up and estimate (guess) what each container can hold. Record these estimates and then measure the volume/capacity of water that each container can hold using the measuring jug. Please record your results. Compare your estimates and your results.