





Steps to Success

Date	4.2.21
Subject/s	Maths
Learning Objective 	To identify appropriate units of measure

SA 	TA 
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Success Criteria 	I can identify units for length, weight and capacity		
	I can identify smaller and larger units of measure		
	I can choose appropriate units for measuring		
Support	Independent	Adult Support ()	Group Work

Pre-task:

Choose the unit of measure which would be most appropriate to measure the items

cm	kg	km	g	m	ml	mm	litres	tonnes
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- The weight of an elephant -
- The volume of water in a bath -
- The length of an ant -
- The length of a football pitch -
- The weight of an apple

Pre-task Answers

- The weight of an elephant – tonnes or kg
- The volume of water in a bath - litres
- The length of an ant - mm
- The length of a football pitch - m
- The weight of an apple – g

How did you do? If you feel confident, move straight to Fluency, if not, look at the Teacher Led.

Teacher Led

We are looking at metric units of measure. Metric units are split into 10s, 100s or 1000s.

First let's look at the different types of measurement.

Length/distance – these units measure how long or how far something is. Metric units for length include:

Kilometres – km
Metres – m
Centimetres – cm
Millimetres – mm



Weight/mass – these units measure how heavy something is. Metric units for weight include:

Tonne
Kilograms – kg
Grams – g



Capacity – these units measure volume, usually liquid. Metric units for capacity include:

Litres – l
Millilitres – ml



Now let's think about the size of each measurement. The prefixes on each word can help us here.

Kilo – means thousand – usually used for bigger units

Centi – means ten – tends to be in the middle

Milli – means thousand – usually used for the smaller units.

The units in the coloured squares are written from largest at the top, to smallest at the bottom.

Fluency

5a. Match the units of measurement to the correct categories.

weight

millilitres

distance

litres

volume

kilometres

grams

5b. Match the units of measurement to the correct categories.

weight

kilograms

length

millilitres

volume

metres

centimetres

6a. Circle the odd one out.

A. The weight of a bag of apples

B. 1.5kg

C. 250km

D. 500g

6b. Circle the odd one out.

A. 500ml

B. volume of a bottle

C. 10L

D. 150cm

7a. Tick the noun that is more likely to be 1.5m high.

table

teacher

dog

7b. Tick the noun that is more likely to have a capacity of 2L.

pool

bath

lemonade bottle

8a. Estimate and underline the most accurate statements for a chair.

It is $1\text{m} \frac{1}{2}$ high.

It weighs 0.6kg.

It weighs 6kg.



8b. Estimate and underline the most accurate statements for a bucket.

It has a volume of 1.5L.

It is 1.5m tall.

It weighs 1kg.



Fluency Answers

5a. Weight – grams; distance – kilometres;
volume – litres, millilitres.

6a. 250km is the odd one out; the others
are all units of weight.

7a. teacher

8a. It is $1\frac{1}{2}$ metre high; It weighs 6kg.

5b. Weight – kilograms; length –
centimetres, metres; volume – millilitres.

6b. 150cm is the odd one out; the others
are all units of volume.

7b. lemonade bottle

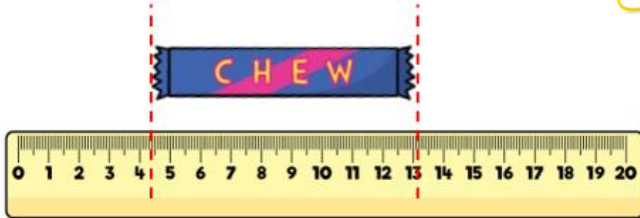
8b. It has a volume of 1.5L; It weighs 1kg.

Problem Solving and Reasoning

Teddy thinks his chew bar is 13.2 cm long.

Explain it!

Do you agree? Explain why.



Terrie is measuring the length of her classmates' arms and recording her results.

Jenny	0.3	<input type="text"/>
Gerry	400	<input type="text"/>
Jonah	38	<input type="text"/>

She has forgotten to write the unit of measurement.

Which unit of measure could she be using for each length? Convince me.

The children are estimating how much water is needed to fill a bath.

Explain it!



Susie

I think it will be around 115.5ml.



I think it will be around 115.5L.



Jojo

Who do you agree with and why?

Answers

Teddy is wrong because he has not lined up the end of his chew bar with zero.
It is actually 8.8 cm long.

Various answers, for example: 0.3m, 400mm, 38cm. Each is around the same length when converted to the same unit, and children in one class would have similar length arms.

Various answers, for example:
I agree with Jojo because a bath requires a large amount of water to fill it, and litres is a greater measure than millilitres. In context 150ml is about half of a small glass of water.