Varied Fluency
Step 1: Metric Measures

National Curriculum Objectives:

Mathematics Year 6: (6M5) Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
Mathematics Year 6: (6M9) Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

Differentiation:

Developing Questions to support using context to make accurate estimations of metric measures of length, mass and capacity using whole numbers.
Expected Questions to support using context to make accurate estimations of metric measures of length, mass and capacity using whole numbers and some decimals and fractions.
Greater Depth Questions to support using context to make accurate estimations of metric measures of length, mass, capacity using whole numbers, decimals and fractions. Some square and cube numbers included.

More Year 6 Converting Units resources.

Did you like this resource? Don't forget to review it on our website.

Metric Measures

1a. Match the units of measurement to the correct categories.

weight	centimetres
length	grams
	millimetres

D VF

Metric Measures

1b. Match the units of measurement to the correct categories.

weight	millimetres
length	metres
	kilograms

D VF

2a. Circle the odd one out.

A. 25cm

B. Length of a football pitch

C. 10km

D. 100g

D VF

2b. Circle the odd one out.

A. Weight of a bag of potatoes

B. 200g

C. 50m

D. 2kg

D VF

3a. Tick the noun that is more likely to be 30cm long.

- playground
- ruler
- table

D VF

3b. Tick the noun that is more likely to weigh 500g.

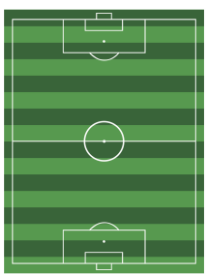
- teacher
- bag of carrots
- horse

D VF

4a. Estimate and underline the most accurate statement for a football pitch.

It is 90m long.

It is 2km long.



D VF

4b. Estimate and underline the most accurate statement for a horse.

It weighs 500kg.

It weighs 5kg.

D VF

Metric Measures

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

weight	millilitres
distance	litres
volume	kilometres
	grams

VF

Metric Measures

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

weight	kilograms
length	millilitres
volume	metres
	centimetres

VF

6a. Circle the odd one out.

A. The weight of a bag of apples

B. 1.5kg

C. 250km

D. 500g

VF

6b. Circle the odd one out.

A. 500ml

B. volume of a bottle

C. 10L

D. 150cm

VF

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

- table
- teacher
- dog

VF

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

- pool
- bath
- lemonade bottle

VF

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

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

It weighs 0.6kg.

It weighs 6kg.

VF

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

Is has a volume of 1.5L.

It is 1.5m tall.

It weighs 1kg.

VF

Metric Measures

9a. Match the units of measurement to the correct categories.

weight	tonnes
length	millilitres
distance	kilometres
volume	grams
area	km^2
	m^3

GD VF

Metric Measures

9b. Match the units of measurement to the correct categories.

weight	cm^3
length	centimetres
distance	centilitres
volume	mm^2
area	metres
	kilograms

GD VF

10a. Circle the odd one out.

A. Area of a rugby pitch

B. $\frac{1}{2}$ $50cm^3$

C. $2.5km^2$

D. $100.25cm^2$

GD VF

10b. Circle the odd one out.

A. 1.5L

B. 200cl

C. $\frac{2}{8}$ of 358mm

D. $125cm^3$

GD VF

11a. Tick the noun that is more likely to hold a volume of 80L.

- pool
- bath
- milk bottle

GD VF

11b. Tick the noun that is more likely to have an area of 7,140m^2.

- theme park
- classroom
- football pitch

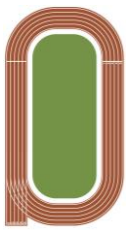
GD VF

12a. Estimate and underline the most accurate statements for a running track.

It has $\frac{1}{2}$ a 1,600m circumference.

It is 100m long.

It has a volume of $150cm^3$.



GD VF

12b. Estimate and underline the most accurate statements for a door.

It is 2.4m x $\frac{3}{4}$ m tall.

It has an area of $10m^2$.

It has an area of $3m^2$.

GD VF

Varied Fluency
Metric Measures

Developing

1a. Weight – grams; length – centimetres, millimetres.

2a. 100g is the odd one out; the others are all units of length.

3a. ruler

4a. It is 90m long.

Expected

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.

Greater Depth

9a. Weight – tonnes, grams; distance – kilometres; volume – millilitres, m^3; area – km^2.

10a. $\frac{1}{2}$ $50cm^3$ is the odd one out; the others are all units of area.

11a. bath

12a. It has $\frac{1}{2}$ a 1,600m circumference; It is 100m long.

Varied Fluency
Metric Measures

Developing

1b. Weight – kilograms; length – millimetres, metres.

2b. 50m is the odd one out; the others are all units of weight.

3b. bag of carrots

4b. It weighs 500kg.

Expected

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.

Greater Depth

9b. Weight – kilograms; length – centimetres, metres; volume – centilitres, cm^3; area – mm^2.

10b. $\frac{2}{8}$ of 358mm; the others are all units of volume.

11b. football pitch

12b. It is 2.4m x $\frac{3}{4}$ m tall; It has an area of $3m^2$.