

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



VF

Metric Measures

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

weight

millimetres

length

metres

kilograms



VF

2a. Circle the odd one out.

A. 25cm

B. Length of a football pitch

C. 10km

D. 100g



VF

2b. Circle the odd one out.

A. Weight of a bag of potatoes

B. 200g

C. 50m

D. 2kg



VF

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

playground

ruler

table



VF

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

teacher

bag of carrots

horse

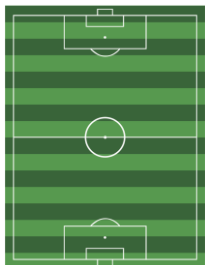


VF

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

It is 90m long.

It is 2km long.



VF

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

It weighs 500kg.

It weighs 5kg.



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 $1\text{m} \frac{1}{2}$ 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

km²

area

m³



VF

Metric Measures

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

weight

cm³

length

centimetres

distance

centilitres

volume

mm²

metres

area

kilograms



VF

10a. Circle the odd one out.

A. Area of a rugby pitch

B. $\frac{1}{2}$ 50cm³

C. 2.5km²

D. 100.25cm²



VF

10b. Circle the odd one out.

A. 1.5L

B. 200cl

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

D. 125cm³



VF

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

pool

bath

milk bottle



VF

11b. Tick the noun that is more likely to have an area of 7,140m².

theme park

classroom

football pitch



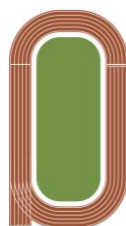
VF

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 150cm³.



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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 10m².

It has an area of 3m².



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 $2.4m \times \frac{3}{4}$ m tall; It has an area of $3m^2$.