

Varied Fluency

Step 2: Convert 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 converting metric measures of length, mass and capacity. Using multiples of 5 with up to 1 decimal place (0.5).

Expected Questions to support converting metric measures of length, mass and capacity. Using any number with up to 3 decimal places. Sometimes includes zero as a place holder.

Greater Depth Questions to support converting metric measures of length, mass and capacity. Using any number with up to 3 decimal places. Includes a number of zeros as place holders. Including fractions and percentages to convert measurements.

More Year 6 [Converting Units](#) resources.

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Convert Metric Measures

Convert Metric Measures

1a. Complete the following statement.

3kg is equal to ____g.



VF

1b. Complete the following statement.

1.5m is equal to ____cm.



VF

2a. Put these measurements in order from smallest to largest.

100cm

1.5m

150mm

1.5cm



VF

2b. Put these measurements in order from largest to smallest.

95g

325g

9.5kg

9,000g



VF

3a. Complete the missing operation and measurement to convert between kg and g.

1.5kg = ____g



VF

3b. Complete the missing operation and measurement to convert between cm and mm.

10.5cm = ____mm



VF

4a. Find and correct the errors in these conversions:

A. 150cm = 15m

B. 50m = 5,000cm

C. 25mm = 2.5cm

D. 1L = 100ml



VF

4b. Find and correct the errors in these conversions:

A. 500g = 5kg

B. 2,200ml = 22L

C. 1.5kg = 1,500g

D. 50cm = 0.5m



VF

Convert Metric Measures

5a. Complete the following statement.

2.52L is equal to ____ml.



VF

Convert Metric Measures

5b. Complete the following statement.

3.04kg is equal to ____g.



VF

6a. Put these measurements in order from smallest to largest.

1.5m

176cm

1,605mm

1m

251cm

1.454mm



VF

6b. Put these measurements in order from largest to smallest.

1.27kg

1,002g

125g

1kg

0.25kg

500g



VF

7a. Complete the missing operation and measurement to convert between g and kg.

539g

= ____kg



VF

7b. Complete the missing operation and measurement to convert between L and ml.

3.2L

= ____ml



VF

8a. Find and correct the errors in these conversions:

A. 1,510m = 151km

B. 1.65kg = 1,650g

C. 72cm = 7.2mm

D. 7,505mm = 7.505m



VF

8b. Find and correct the errors in these conversions:

A. 320mm = 32cm

B. 1,018cm = 10.18m

C. 1.33kg = 133g

D. 2,055g = 2.55kg



VF

Convert Metric Measures

Convert Metric Measures

9a. Complete the following statement.

26% of 1.239kg is equal
to ____g.



VF

9b. Complete the following statement.

38% of 675cm is equal to
____m.



VF

10a. Put these measurements in order
from smallest to largest.

0.008m

0.63cm

$\frac{1}{5}$ of 10.4m

8,003mm

50% of
1.46mm

81.08cm



VF

10b. Put these measurements in order
from largest to smallest.

10% of
0.56ml

0.001L

0.024L

0.206ml

$\frac{1}{4}$ of 0.18L

0.203L



VF

11a. Complete the missing operation and
measurement to convert between m and
mm.

1.104m

= ____mm



VF

11b. Complete the missing operation and
measurement to convert between L and
ml.

60.002L

= ____ml



VF

12a. Find and correct the errors in these
conversions:

A. 563m = 0.563km

B. 23.56mm = 2,356cm

C. 548,000mm = 5,480m

D. 800.006cm = 8,000.06mm



VF

12b. Find and correct the errors in these
conversions:

A. 3.546L = 354.6ml

B. 2ml = 0.02L

C. 0.003L = 3ml

D. 598ml = 0.598L



VF

Varied Fluency
Convert Metric Measures

Developing

- 1a. 3,000g
2a. 1.5cm; 150mm; 100cm, 1.5m
3a. $\times 1,000$; 1,500
4a. A. 150cm = 1.5m; D. 1L = 1,000ml

Expected

- 5a. 2,520ml
6a. 1.454mm; 251cm; 1m; 1.5m; 1,605mm;
176cm
7a. $\div 1,000$; 0.539
8a. A. 1,550m = 1.51km; C. 72cm = 720mm

Greater Depth

- 9a. 322.14g
10a. 50 % of 1.46mm (0.73mm); 0.63cm;
0.008m; 81.08cm; $\frac{1}{5}$ of 10.4m (2.08m);
8,003mm
11a. $\times 1,000$; 1,104
12a. B. 23.56mm = 2.356cm; C. 548,000mm
= 548m

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Convert Metric Measures

Developing

- 1b. 150cm
2b. 9.5kg; 9,000g; 325g; 95g
3b. $\times 10$; 105
4b. A. 500g = 0.5kg; B. 2,200ml = 2.2L

Expected

- 5b. 3,040g
6b. 1.27kg; 1,002g; 1kg; 500g; 0.25kg;
125g
7b. $\times 1,000$; 3,200
8b. C. 1.33kg = 1,330g; D. 2,055g =
2.055kg

Greater Depth

- 9b. 2.565m
10b. 0.203L; $\frac{1}{4}$ of 0.18L (0.045L); 0.024L;
0.001L; 0.206ml; 10% of 0.56ml (0.056ml)
11b. $\times 1,000$; 60,002
12b. A. 3.546L = 3,546ml; B. 2ml = 0.002L