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.

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

Convert Metric Measures

1a. Complete the following statement.

3kg is equal to ____g.

D VF

Convert Metric Measures

1b. Complete the following statement.

1.5m is equal to ____cm.

D VF

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

100cm	1.5m
150mm	1.5cm

D VF

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

95g	325g
9.5kg	9,000g

D VF

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

1.5kg ☐ = _____g

D VF

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

10.5cm ☐ = _____mm

D VF

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

A. 150cm = 15m

B. 50m = 5,000cm

C. 25mm = 2.5cm

D. 1L = 100ml

D 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

D VF

Convert Metric Measures

5a. Complete the following statement.

2.52L is equal to ____ml.

E VF

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

1.5m	176cm	1,605mm
1m	251cm	1.454mm

E VF

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

539g ☐ = _____kg

E 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

E VF

Convert Metric Measures

5b. Complete the following statement.

3.04kg is equal to ____g.

E VF

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

1.27kg	1,002g	125g
1kg	0.25kg	500g

E VF

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

3.2L ☐ = _____ml

E 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

E VF

Convert Metric Measures

9a. Complete the following statement.

26% of 1.239kg is equal to ____g.

GD 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

GD VF

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

1.104m ☐ = _____mm

GD 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

GD VF

Convert Metric Measures

9b. Complete the following statement.

38% of 675cm is equal to ____m.

GD 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

GD VF

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

60.002L ☐ = _____ml

GD 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

GD VF

Varied Fluency
Convert Metric Measures

Developing

1a. 3,000g

2a. 1.5cm; 150mm; 100cm, 1.5m

3a. x 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. ÷ 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. x 1,000; 1,104

12a. B. 23.56mm = 2.356cm; C. 548,000mm = 548m

Varied Fluency
Convert Metric Measures

Developing

1b. 150cm

2b. 9.5kg; 9,000g; 325g; 95g

3b. x 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. x 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. x 1,000; 60,002

12b. A. 3.546L = 3,546ml; B. 2ml = 0.002L