Varied Fluency
Step 2: Convert Metric Measures

National Curriculum Objectives:

Mathematics Year 6: (6M6) Convert between miles and kilometres
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
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

Differentiation:

Developing Questions to support converting metric measures. Using multiples of 5 with up to 1 decimal place.
Expected Questions to support converting metric measures. Using multiples of 5 with up to 3 decimal places. Sometimes includes zero as a place holder.
Greater Depth Questions to support converting metric measures. 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. True or false?

> 10% of 3kg is smaller than 1,000g.

⭐ VF

1b. True or false?

> 50% of 1m is larger than 600cm.

⭐ 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.   15kg   =   1,500g

d.   50cm   =   0.5m

⭐ VF

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Varied Fluency – Convert Metric Measures – Year 6 Developing

Convert Metric Measures

5a. True or false?

> 50% of 2.5L is larger than 1,000ml.

VF

5b. True or false?

> 20% of 2.5kg is smaller than 500g.

VF

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

| 1.5m | 175cm | 1,605mm |

| 1m | 250cm | 1.455mm |

VF

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

| 1.25kg | 1,005g | 125g |

| 1kg | 0.25kg | 500g |

VF

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

535g ☐ = _____kg

VF

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

3.5L ☐ = _____ml

VF

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

a.   1,550m   =   155km

b.   1.65kg   =   1,650g

c.   75cm   =   7.5mm

d.   7,505mm   =   7.505m

VF

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

a.   320mm   =   32cm

b.   1,015cm   =   10.15m

c.   1.35kg   =   135g

d.   2,055g   =   2.55kg

VF

Convert Metric Measures

Convert Metric Measures

9a. True or false?

> **26% of 1.239kg is smaller than 322g.**

GD

VF

9b. True or false?

> **38% of 675cm is larger than 2.465m.**

GD

VF

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

0.008m	0.63cm	2.08m
8,003mm	0.73mm	81.08cm

GD

VF

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

0.056ml	0.001L	0.024L
0.206ml	0.045L	0.203L

GD

VF

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

1.104m ☐ = _____mm

GD

VF

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

60.002L ☐ = _____ml

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

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. True. 300g (10% of 3kg) is smaller than 1,000g.

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

3a. x 1,000; 1,500

4a. a: 150cm = 1.5m; d: 1L = 1,000ml

Expected

5a. True. 1,250ml (50% of 2.5L) is larger than 1,000ml.

6a. 1.455mm; 1m; 1.5m; 1,605mm; 175cm; 250cm

7a. ÷ 1,000; 0.535

8a. a: 1,550m = 1.55km; c: 75cm = 750mm

Greater Depth

9a. False. 322.14g (26% of 1.239kg) is larger than 322g.

10a. 0.73mm; 0.63cm; 0.008m; 81.08cm; 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. False. 500cm (50% of 1m) is smaller than 600cm.

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

3b. x 10; 105

4b. a: 500g = 0.5kg; b: 2,200ml = 2.2L

Expected

5b. False. 500g (20% of 2.5kg) = 500g.

6b. 1.25kg; 1,005g; 1kg; 500g; 0.25kg; 125g

7b. x 1,000; 3,500

8b. c: 1.35kg = 1,350g; d: 2,055g = 2.055kg

Greater Depth

9b. True. 2.565m (38% of 675cm) is larger than 2.465m.

10b. 0.203L; 0.045L; 0.024L; 0.001L; 0.206ml; 0.056ml

11b. x 1,000; 60,002

12b. a: 3.546L = 3,546ml; b: 2ml = 0.002L