

# Homework/Extension

## Step 3: Metric Units

### National Curriculum Objectives:

Mathematics Year 5: (5M5) [Convert between different units of metric measure \(for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre\)](#)

### Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

**Developing** Identify the digit cards to make the number sentence correct by converting metric measures. Multiples of 10.

**Expected** Identify the digit cards to make the number sentence correct by converting metric measures. Any numbers, including some use of zero as a place holder and some fractions.

**Greater Depth** Identify the digit cards to balance each equation by converting non-direct metric measures. Involves multi-step conversion calculations involving any numbers, including the use of zero as a place holder and fractions.

Questions 2, 5 and 8 (Varied Fluency)

**Developing** Match the pairs and find the odd one out by converting metric measures. Multiples of 10.

**Expected** Match the pairs and find the odd one out by converting metric measures using any numbers, including some use of zero as a place holder and some fractions.

**Greater Depth** Match the equivalent values by converting non-direct metric measures. Involves multi-step conversion calculations involving any numbers, including the use of zero as a place holder and fractions.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

**Developing** Determine three measurements to fit the criteria by converting metric measures. Multiples of 10.

**Expected** Determine four measurements to fit the criteria by converting metric measures using any numbers, including some use of zero as a place holder and some fractions.

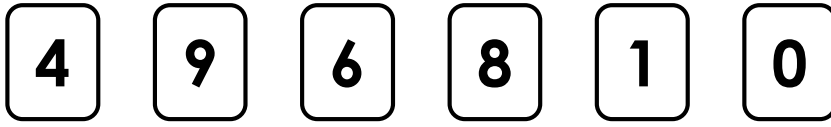
**Greater Depth** Determine four measurements to fit the criteria to fit the criteria by converting non-direct metric measures. Involves multi-step conversion calculations involving any numbers, including the use of zero as a place holder and fractions.

More [Year 5 Converting Units](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Metric Units

1. Use the digit cards below to make the number sentences correct. You may use each digit card more than once.



$400\text{cm} = \underline{\quad} \text{m}$

$8\text{km} = \underline{\quad} \text{m}$

$\underline{\quad} \text{cm} = 9\text{m}$

$14\text{m} = \underline{\quad} \text{cm}$

$600\text{mm} = \underline{\quad} \text{cm}$

$4,000\text{m} = \underline{\quad} \text{km}$



VF  
HW/Ext

2. Match the pairs and find the odd one out.

A.

300cm

30cm

300mm

30m

3m

B.

900cm

90mm

9mm

9m

9cm



VF  
HW/Ext

3. Farmer Tom wants to build a wall that is 3m wide using exactly three bricks. The length of the bricks are shown below.

A	B	C	D
1m	90cm	400mm	2m
F	G	H	I
500cm	70cm	300mm	200m

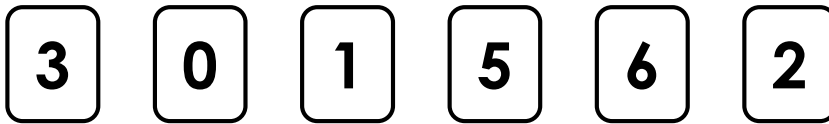
Which three bricks does he choose?



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# Metric Units

4. Use the digit cards below to make the number sentences correct. You may use each digit card more than once.



$$350\text{m} = \underline{\quad\quad} \text{ cm}$$

$$650\text{mm} = \underline{\quad\quad} \text{ cm}$$

$$2\frac{1}{2} \text{ km} = \underline{\quad\quad} \text{ m}$$

$$6\frac{1}{4} \text{ m} = \underline{\quad\quad} \text{ cm}$$

$$\underline{\quad\quad} \text{ mm} = \frac{1}{2} \text{ m}$$

$$50,000\text{cm} = \underline{\quad\quad} \text{ km}$$



VF  
HW/Ext

5. Match the pairs and find the odd one out.

A.

500m

5,300mm

530cm

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

5,003cm

B.

750mm

$\frac{1}{4} \text{ km}$

250m

750m

75,000cm



VF  
HW/Ext

6. Abbey wants to create a 5 metre long wall on one side of her flower bed using exactly four bricks. The length of the bricks are shown below. Which four bricks could she choose?

A	B	C	D	E
1.1m	90cm	450cm	3.7m	2,500mm
F	G	H	I	J
500mm	390cm	$\frac{1}{4} \text{ km}$	0.2m	4.8m

Find four different combinations using fewer bricks.



RPS  
HW/Ext

## Metric Units

7. Use the digits below to balance each equation. You may use each digit card more than once.



$$9\text{m} = 1,500\text{mm} + \underline{\hspace{2cm}}\text{cm} \quad 350\text{cm} = 1\frac{3}{4}\text{m} + \underline{\hspace{2cm}}\text{cm}$$

$$4\text{km} = \underline{\hspace{2cm}}\text{cm} + 2,500\text{m} \quad 13\text{m} = 4,360\text{mm} + \underline{\hspace{2cm}}\text{cm}$$



VF  
HW/Ext

8. Match the equivalent values and find the odd one out.

66,800mm	66.08m	68,600mm	9,702m
68.6m	6,680cm	7.9m	
66,080mm	7,900mm	97,200mm	970,200cm



VF  
HW/Ext

9. Willow wants to create a 250cm tall mosaic wall using exactly four tiles. The heights of the tiles are shown below. What four tiles could she choose?

A	B	C	D	E
1.3m + 0.3m	400mm	0.7m	30mm + 4cm	560mm
F	G	H	I	J
3cm + 10mm	0.3m	$\frac{1}{5}\text{m}$	90cm + 60mm	500mm

Find four different combinations using fewer or more than four tiles.



RPS  
HW/Ext

# Homework/Extension

## Metric Units

### Developing

1. 4m, 900cm, 60cm  
8,000m, 1,400cm, 4km
2. A: 3m = 300cm; 30cm = 300mm. The odd one out is 30m.  
B: 9m = 900cm; 9cm = 90mm. The odd one out is 9mm.
3. D + G + H

### Expected

4. 35,000cm, 2,500m, 500mm  
65cm, 625 cm,  $\frac{1}{2}$  km
5. A: 500m =  $\frac{1}{2}$  km; 5,300mm = 530cm. The odd one out is 5,003cm.  
B 250m =  $\frac{1}{4}$  km; 750m = 75,000cm. The odd one out is 750mm.
6. A + B + E + F. Other combinations include: A + G; C + F; D + A + I; I + J

### Greater Depth

7. 750cm, 175cm  
150,000cm, 864cm
8. 66,800mm = 6,680cm; 66.08m = 66,080mm; 7,900mm = 7.9m; 9,702m = 970,200cm;  
68,600mm = 68.6m. The odd one out is 97,200mm
9. A + E + F + G. Other combinations include: H + J; A + B + J; A + C + H; C + F + G + I + J