Tuesday Activity: Millilitres and Millimetres

Key facts to remember when answering questions:

1 litre (L) = 1000 millilitres (ml)   1 centimetre (cm) = 10 millimetres (mm)

½ L = 500 ml   ½ cm = 5 mm

Please choose the level that best suits you: green, pink or purple.

There are 2 parts in each level. Please answer both parts.

An extension is provided for each level.

Why not challenge yourself? Do more than one level.

Green

Part 1:

1a. Multiply or divide? Show you know how to convert the measurement by completing these statements. To convert 5m into millimetres, _____ by 1,000. The answer is _____. To convert 3,000ml into litres, _____ by 1,000. The answer is _____. To convert 7L into millilitres, _____ by 1,000. The answer is _____. ☆	1b. Multiply or divide? Show you know how to convert the measurement by completing these statements. To convert 9 litres into millilitres, _____ by 1,000. The answer is _____. To convert 3,000mm into metres, _____ by 1,000. The answer is _____. To convert 8,000ml into litres, _____ by 1,000. The answer is _____. ☆

2a. Complete the table below.

mm	m
	2
4,000	
8,000	
	3

2b. Complete the table below.

ml	L
	3
	7
6,000	
	10

3a. Order these mixed measurements from largest to smallest.

2,000mm	6,000mm	1m

3m	5,000mm

VF

3b. Order these mixed measurements from smallest to largest.

3m	9,000mm	2,000mm

5m	8,000mm

VF

4a. Draw lines to match the equivalent measurements.

1,000ml	2,000mm
2m	3m
5L	1L
3,000mm	5,000ml

VF

4b. Draw lines to match the equivalent measurements.

4L	2L
3m	3,000mm
6,000mm	6m
2,000ml	4,000ml

VF

Part 2:

1a. Which two measurements combine to make 5m?

2,000mm		3m

1,000mm

PS

1b. Which two measurements combine to make 6L?

2L		5,000ml

4,000ml

PS

2a. Is the following statement correct?

5,000ml	=	55L

Explain your answer.

R

2b. Is the following statement correct?

6m	>	5,000mm

Explain your answer.

R

Extension:

3a. Kit has 4,000ml of water in his bucket. Billy has 3L of water in his bucket.

Kit adds 2,000ml to his bucket. Billy adds 1L to his bucket.

Kit says,

My bucket has the least amount of water.

Is he right? Explain how you know.

3b. Phoebe has 3L of water in her bucket. Jess has 5,000ml of water in her bucket.

Phoebe adds 4L of water to her bucket. Jess adds 1,000ml to her bucket.

Jess says,

My bucket has the least amount of water.

Is she right? Explain how you know.

Pink

Part 1:

5a. Multiply or divide? Show you know how to convert the measurement by completing these statements.

To convert 2.3m into millimetres, _____ by 1,000. The answer is _____ .

To convert 3,200ml into litres, _____ by 1,000. The answer is _____ .

To convert 5.7L into millilitres, _____ by 1,000. The answer is _____ .

5b. Multiply or divide? Show you know how to convert the measurement by completing these statements.

To convert 4,100ml into litres, _____ by 1,000. The answer is _____ .

To convert 7.5m into millimetres, _____ by 1,000. The answer is _____ .

To convert 9.4L into millilitres, _____ by 1,000. The answer is _____ .

6a. Complete the table below.

$\frac{?}{1000}$	ml	L
$\frac{300}{1000}$		
	900	
		0.6

6b. Complete the table below.

$\frac{?}{1000}$	ml	L
	200	
		0.4
$\frac{800}{1000}$		

7a. Order these mixed measurements from largest to smallest.

| 4,100mm | 4m | 4.2m |

| 0.3m | 400mm |

7b. Order these mixed measurements from smallest to largest.

| 8L | 750ml | 8,800ml |

| 7.5L | 0.5L |

8a. Draw lines to match the equivalent measurements.

1,500ml	2,500mm
$2\frac{1}{2}$ m	2,200mm
1.4L	1.5L
$2\frac{1}{5}$ m	1,400ml

VF

8b. Draw lines to match the equivalent measurements.

$4\frac{1}{5}$ L	4.9L
6.2m	6,200mm
4,500mm	$4\frac{1}{2}$ m
4,900ml	4,200ml

VF

Part 2:

4a. Which three measurements combine to make 4.3m?

2,500mm   2,000mm

0.3m

0.6m   1,500mm

PS

4b. Which three measurements combine to make 5.7L?

0.5L   1,500ml

3,700ml

1.3L   4.6L

PS

5a. Is the following statement correct?

$\frac{50}{1000}$ L < 50ml = 0.5L

Explain your answer.

R

5b. Is the following statement correct?

$\frac{900}{1000}$ L = 900ml > 0.9L

Explain your answer.

R

Extension:

6a. Jack's bucket can hold 4,600ml. Peter's bucket can hold 5.2L. Both fill their buckets half way. Jack adds an extra 700ml and Peter adds an extra 500ml.

Jack says,

My bucket has the greatest amount of water.

Is he right? Explain how you know.

R

6b. Brooke's bucket can hold 2,800ml. Lily's bucket can hold 1.2L. Both fill their buckets half way. Brooke adds an extra 500ml and Lily adds an extra 200ml.

Lily says,

My bucket has the least amount of water.

Is she right? Explain how you know.

R

Purple

Part 1:

9a. Multiply or divide? Show you know how to convert the measurement by completing these statements.

To convert 2.34m into millimetres, _____ by 1,000. The answer is _____.

To convert 4,010ml into litres, _____ by 1,000. The answer is _____.

To convert 5.77L into millilitres, _____ by 1,000. The answer is _____.

9b. Multiply or divide? Show you know how to convert the measurement by completing these statements.

To convert 4.18 litres into millilitres, _____ by 1,000. The answer is _____.

To convert 7,040mm into metres, _____ by 1,000. The answer is _____.

To convert 9.49L into millilitres, _____ by 1,000. The answer is _____.

10a. Complete the table below.

$\frac{?}{1000}$	ml	L
$\frac{350}{1000}$		
	590	
		0.71

10b. Complete the table below.

$\frac{?}{1000}$	ml	L
	750	
		0.06
$\frac{950}{1000}$		

11a. Order these mixed measurements from largest to smallest.

460mm   4.36m   4.26m

0.29m   426mm

11b. Order these mixed measurements from smallest to largest.

8.76L   760ml   8,610ml

7.6L   0.86L

12a. Draw lines to match the equivalent measurements.

7,760ml	7,750mm
$7\frac{3}{4}$ m	7,500mm
7.45L	7.76L
$7\frac{2}{4}$ m	7,450ml

12b. Draw lines to match the equivalent measurements.

5,500mm	5,050mm
5,950ml	5.95L
5,750ml	$5\frac{1}{2}$ m
5.05m	$5\frac{3}{4}$ L

Part 2:

7a. Which three measurements combine to make 6.27m?

$1\frac{1}{4}$ m	5,000mm

0.2m

0.02m	6,000mm

PS

7b. Which three measurements combine to make 5.75L?

1.75L	1,250ml

2,700ml

1.5L	$2\frac{3}{4}$ L

PS

8a. Is the following statement correct?

0.06L	>	$\frac{600}{1000}$ L	=	0.6L

Explain your answer.

R

8b. Is the following statement correct?

0.15L	>	$\frac{15}{1000}$ L	<	150ml

Explain your answer.

R

Extension:

9a. Logan's bucket can hold 5,500ml. Noah's bucket can hold 3L. Logan fills his bucket half way. Noah fills his bucket to $\frac{2}{3}$. They then add 750ml of water each.

Logan says,

> My bucket has the least amount of water.

Is he right? Explain how you know.

R

9b. Ava's bucket can hold 6.3L. Olivia's bucket can hold 3,800ml. Ava fills a third of her bucket and then adds 250ml. Olivia fills her bucket half way. She then adds 450ml of water.

Olivia says,

> We have the same amount of water.

Is she right? Explain how you know.

R