

## Year 4 Maths Distance Teaching and Learning

Week beginning: 22<sup>nd</sup> June 2020

Lesson 1		
<b>Learning Intention:</b>  WALT convert between units of length	<b>Key Vocabulary:</b>  Measure – to calculate or find the size or amount of something	<b>What you will need:</b>  A computer, tablet or phone for the starter Maths book Pencil and ruler Video: Year 4 Maths – S2 Week 4 - lesson 1
Starter		
Log into Times Table Rock Stars and complete a gig if it is available. If not, complete a studio session.		
Main Teaching		
<p>Over the next few sessions, we are going to apply the skills we have practiced of multiplying and dividing by ten and a hundred to convert between units of measure. Today's focus is going to be converting between three units of length: millimetres, centimetres and meters.</p> <p>They key facts you will need to remember and refer back to for this session are:</p> <p style="text-align: center;"><u>Millimetre</u> = one thousandth of a metre  <u>Centimetre</u> = one hundredth of a metre</p> <p>Try to remember our 'milli' and 'cent' spelling rules to help you with this topic!</p>		
<div style="background-color: #00b09b; color: white; padding: 10px; border-radius: 10px;"> <p>There are...</p> <div style="text-align: center;"> <p><b>100cm</b></p> <p>in</p> <p><b>1m</b></p> </div> <p>÷ 100</p> <p>x 100</p> </div>	<div style="background-color: #ff00ff; color: white; padding: 10px; border-radius: 10px;"> <p>There are...</p> <div style="text-align: center;"> <p><b>1000mm</b></p> <p>in</p> <p><b>1m</b></p> </div> <p>÷ 1000</p> <p>x 1000</p> </div>	<div style="background-color: #4169e1; color: white; padding: 10px; border-radius: 10px;"> <p>There are...</p> <div style="text-align: center;"> <p><b>10mm</b></p> <p>in</p> <p><b>1cm</b></p> </div> <p>÷ 10</p> <p>x 10</p> </div>
<p>This is a metre.</p> 		
<p>If I zoom in, I see this. This is 10cm.</p> 		
<p>Each of the small lines between the centimetres are millimetres. So, there are one thousand tiny millimetres in the first picture of a metre.</p>		

### Example 1

**How many centimetres are there in 5 metres?**

I know here that I need to convert my units FROM metres TO centimetres. Looking at the key facts at the start of the lesson plan, I know that there are 100cm in every metre so I am going to have 5 lots of 100cm. That means I need to calculate  $5 \times 100$ .

$$1\text{m} = 100\text{cm}$$



$$2\text{m} = 200\text{cm}$$



$$3\text{m} = 300\text{cm}$$



$$4\text{m} = 400\text{cm}$$



$$5\text{m} = 500\text{cm}$$



$$5 \times 100 = 500\text{cm}$$

Th	H	T	U	$\frac{1}{10}$
			5	
	5	0	0	

There are 500cm in 5m.

On a place value chart, because we are multiplying by 100, my 5 ones (for my 5 metres) move two columns left as they have got 100 times bigger.

### Example 2:

**Convert 892cm to metres.**

Here, we know that we need to convert FROM centimetres TO metres. The key facts at the beginning of the lesson show me that to convert from centimetres to metres, I need to divide by 100. This is because I am grouping the centimetres into groups of a hundred, to make metres.

$$892 \div 100 = 8.92$$

$$892\text{cm} = 8.92\text{m}$$

Th	H	T	U	$\frac{1}{10}$	$\frac{1}{100}$
	8	9	2		
		8	9	2	

### Example 3

#### Convert 45cm into millimetres.

Here, we know that we need to convert FROM centimetres TO millimetres. The key facts at the beginning of the lesson show me that to convert from centimetres to millimetres, I need to multiply by 10. This is because there are 10mm in every centimetre.

$$45 \times 10 = 450$$

$$45\text{cm} = 450\text{mm}$$



#### Independent Tasks

Please complete 1 or 2 challenges. If you are finding a challenge too tricky or too easy after 3 questions, you should switch challenges. After you have completed your challenge, check your answers against the mark scheme. If you got an answer wrong, look carefully and identify where you made a mistake.

#### Challenge 1

Use the key facts from the beginning of the lesson plan and a place value chart to complete the below conversions.

Convert each of these to cm.

- 1) 8m
- 2) 3m
- 3) 5.6m

Convert each of these to m.

- 4) 600cm
- 5) 450cm
- 6) 790cm

Convert each of these to mm.

- 7) 85cm
- 8) 42cm

### Challenge 2

Use the key facts from the beginning of the lesson plan and a place value chart to complete the below conversions. Look carefully at what unit you are starting with and what unit you are converting to.

Convert each of these to cm.

- 1) 9.8m
- 2) 4.3m
- 3) 860mm

Convert each of these to m.

- 4) 658cm
- 5) 701cm
- 6) 6350mm

Convert each of these to mm.

- 7) 7.2m
- 8) 86cm

### Challenge X

Fill in the missing numbers:

$$\underline{\quad} \text{ m} = 35\text{cm} = \underline{\quad} \text{ mm}$$

$$5.6\text{m} = \underline{\quad} \text{ cm} = \underline{\quad} \text{ mm}$$

$$7823\text{mm} = \underline{\quad} \text{ cm} = \underline{\quad} \text{ m}$$



## Mark Scheme – Lesson 1

Independent Tasks
<b>Challenge 1</b>
Convert each of these to cm. 1) 8m = <b>800cm</b> 2) 3m = <b>300cm</b> 3) 5.6m = <b>560cm</b> Convert each of these to m. 4) 600cm = <b>6m</b> 5) 450cm = <b>4.5m</b> 6) 790cm = <b>7.9m</b> Convert each of these to mm. 7) 85cm = <b>850mm</b> 8) 42cm = <b>420mm</b>
<b>Challenge 2</b>
Convert each of these to cm. 1) 9.8m = <b>980cm</b> 2) 4.3m = <b>430cm</b> 3) 860mm = <b>86cm</b> Convert each of these to m. 4) 658cm = <b>6.58m</b> 5) 701cm = <b>7.01m</b> 6) 6,350mm = <b>6.35m</b> Convert each of these to mm. 7) 7.2m = <b>7,200mm</b> 8) 86cm = <b>860mm</b>
<b>Challenge X</b>
Fill in the missing numbers: <b>0.35m = 35cm = 350mm</b> <b>5.6m = 560cm = 5,600mm</b> <b>7,823mm = 782.3cm = 7.823m</b>

## Lesson 2

<p>Learning Intention:</p> <p>WALT convert between units of length</p>	<p>Key Vocabulary:</p>	<p>What you will need:</p> <p>A computer, tablet or phone for the starter          Maths book          Pencil and ruler          Video: Year 4 Maths – S2 Week 4 - lesson 2</p>
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### Starter

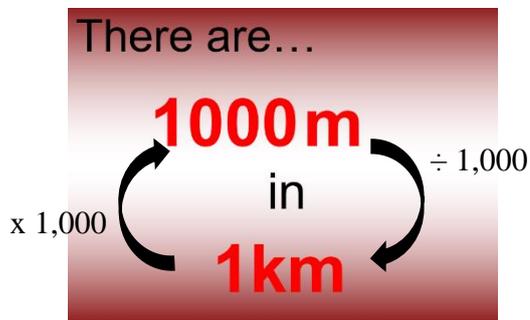
Log into Times Table Rock Stars and complete a gig if it is available. If not, complete a sound check session.

### Main Teaching

Today, we are going to use the last unit of length and practice converting between metres and kilometres.

Using our spelling rules, we know that kilo also means one thousand.

Yesterday, 'milli' referred to one metre being divided into a thousand parts. This time, 'kilo' is referring to a metre being multiplied by a thousand to get one thousand metres, which is equivalent to a kilometre.



Often, you will hear kilometres mentioned for measuring a distance of a journey or maybe land between two places.

Although you may have multiplied and divided by 1,000 yesterday, remember that it means your number is getting 1,000 times bigger or smaller so your digits would move 3 spaces along your place value chart.

### Example 1

#### Convert 2,500m to kilometres.

Here, we know that we are converting FROM metres TO kilometres. Using the key facts from the start of the lesson plan, we know that we need to divide 2,500 by 1,000. This is because there are 1,000m in every kilometre so we must divide the 2,500 into groups of 1,000 to find out how many whole and part kilometres we get.

$$2,500 \div 1,000 = 2.5$$

$$2,500\text{m} = 2.5\text{km}$$

On our place value chart, the digits would all move 3 spaces to the right, as they are getting 1,000 times smaller.

Th	H	T	U	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
2	5	0	0			

Handwritten annotations on the table: Arched lines under '2', '5', and '0' in the Tens, Hundreds, and Thousands columns respectively, with arrows pointing to the right. A '2' is written under the 'U' column. A '5' is written under the  $\frac{1}{10}$  column. A '0' is written under the  $\frac{1}{100}$  column. Another '0' is written under the  $\frac{1}{1000}$  column. An arrow points from the '0' in the  $\frac{1}{1000}$  column to the right, with the text 'NOT INCLUDED' written next to it.

### Example 2

#### Convert 6.87km to metres.

Here, we know that we are converting FROM kilometres TO metres. Using the key facts from the start of the lesson plan, we know that we need to multiply 6.87 by 1,000. This is because there are 1,000m in every kilometre, so each one km would make 1,000m.

$$6.87 \times 1,000 = 6,870$$

$$6.87\text{km} = 6,870\text{m}$$

On our place value chart, the digits would all move 3 spaces to the left, as they are getting 1,000 times bigger.

Th	H	T	U	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
			6	8	7	

Handwritten annotations on the table: Arched lines under '6', '8', and '7' in the  $\frac{1}{10}$ ,  $\frac{1}{100}$ , and  $\frac{1}{1000}$  columns respectively, with arrows pointing to the left. A '6' is written under the 'U' column. A '7' is written under the  $\frac{1}{1000}$  column. An arrow points from the '6' in the 'U' column to the left, towards the 'Th' column.



### Independent Tasks

Please complete 1 or 2 challenges. If you are finding a challenge too tricky or too easy after 3 questions, you should switch challenges. After you have completed your challenge, check your answers against the mark scheme. If you got an answer wrong, look carefully and identify where you made a mistake.

#### Challenge 1

Use the key facts from the beginning of the lesson and a place value chart to fill in the missing numbers below.

- 1) \_\_\_\_ km = 8,000m
- 2) \_\_\_\_ km = 6,500m
- 3) 7.8km = \_\_\_\_ m
- 4) 5.2km = \_\_\_\_ m
- 5) \_\_\_\_ km = 4,300m
- 6) 9.1km = \_\_\_\_ m
- 7) 2km = \_\_\_\_ m
- 8) \_\_\_\_ km = 7,600m

#### Challenge 2

Use the key facts from the beginning of the lesson and a place value chart to fill in the missing numbers below.

- 1) \_\_\_\_ km = 6,700m
- 2) 3.4km = \_\_\_\_ m
- 3) 6.34km = \_\_\_\_ m
- 4) \_\_\_\_ km = 5602m
- 5) 4.01km = \_\_\_\_ m
- 6) 9.931 = \_\_\_\_ m
- 7) \_\_\_\_ km = 5,552m
- 8) \_\_\_\_ km = 56m
- 9) How many metres are in  $\frac{1}{4}$  of a km?

#### Challenge X

I was delivering parcels around Hertfordshire. I travelled from St Albans to Watford, which was 16km. I then travelled from Watford to Radlett, which was 9 km. Next, I went from Radlett to London Colney, which was 6.2km. Finally, I travelled from London Colney to Welwyn, which was 14.7km.

How many metres did I travel?



## Mark Scheme – Lesson 2

Independent Tasks	
Challenge 1	
1)	8 km = 8,000m
2)	6.5 km = 6,500m
3)	7.8km = 7,800m
4)	5.2km = 5,200 m
5)	4.3 km = 4,300m
6)	9.1km = 9,100m
7)	2km = 2,000m
8)	7.6km = 7,600m
Challenge 2	
1)	6.7 km = 6,700m
2)	3.4km = 3,400 m
3)	6.34km = 6,340m
4)	5.602 km = 5,602m
5)	4.01km = 4,010m
6)	9.931 = 9,931m
7)	5.552 km = 5,552m
8)	0.056 km = 56m
9)	There are 250 metres in $\frac{1}{4}$ of a kilometres.
Challenge X	
16,000 + 9,000 + 6,200 + 14,700 = 45,900	
You travelled 45,900m.	

### Lesson 3

#### Learning Intention:

WALT convert between units of mass and capacity.

#### Key Vocabulary:

Mass – a measure of how much matter is in an object. (In Year 4 we would think of it as the weight of an object)

Capacity – the amount that something can hold (normally referred to for liquid)

#### What you will need:

A computer, tablet or phone for the starter  
 Maths book  
 Pencil and ruler  
 Video: Year 4 Maths – S2  
 Week 4 - lesson 3

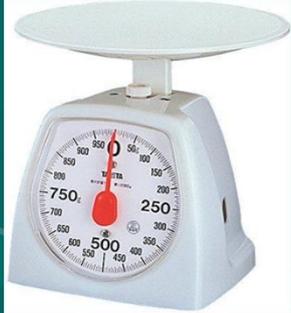
#### Starter

Log into Times Table Rock Stars and complete a gig if it is available. If not, complete a garage session.

#### Main Teaching

Today, we are going to convert between units for two types of measurement. We are going to look at units of measure for both capacity and mass. Take a look at the key vocabulary section if you are unsure about either of those terms.

#### Mass



x 1,000

  
  
 $1000g = 1kg$   
  

÷ 1,000

Kilo for kilograms refers to 1,000 lots of 1 gram. Therefore, a kilogram is a heavier amount of mass than a gram.

#### Capacity



x 1,000

  
  
 $1000ml = 1L$   
  

÷ 1,000

Milli for millilitre refers to 1,000 parts of a litre. Therefore, a millilitre is a smaller capacity amount than a litre.

### Example 1

#### Convert 4,700g to kilograms.

Here, we know that we are converting FROM grams TO kilograms. Using the key facts from the start of the lesson plan, we know that we need to divide by 1,000. This is because there are 1,000g in every kilogram so we must divide the 4,700g into groups of 1,000 to find out how many whole and part kilograms we get.

$$4,700 \div 1,000 = 4.7$$

$$4,700\text{g} = 4.7 \text{ kg}$$

On a place value chart, the digits would move 3 places to the right.



### Example 2

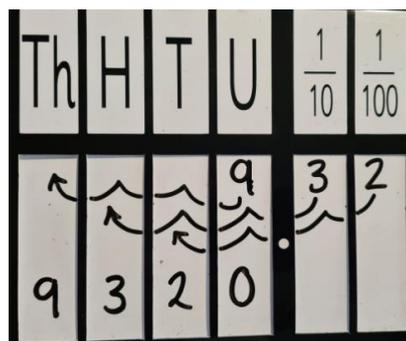
#### 9.32L is equivalent to how many millilitres?

Here, we know that we are converting FROM litres TO millilitres. Using the key facts from the start of the lesson plan, we know that we need to multiply by 1,000. This is because there are 1,000ml in every litre, so each litre will create 1,000ml. Therefore, our amount is getting 1,000 times greater.

$$9.32 \times 1,000 = 9,320$$

9.3L is equivalent to 9,320ml.

On a place value chart, the digits would move 3 places to the left.



### Independent Tasks

Please complete 1 or 2 challenges. If you are finding a challenge too tricky or too easy after 3 questions, you should switch challenges. After you have completed your challenge, check your answers against the mark scheme. If you got an answer wrong, look carefully and identify where you made a mistake.

#### Challenge 1

Fill in the missing numbers below. Remember to use the key facts from the start of the lesson plan and a place value chart if you need to!

- 1) 2,000ml = \_\_\_\_ L
- 2) \_\_\_\_ ml = 7.2L
- 3) 4,900ml = \_\_\_\_ L
- 4) \_\_\_\_ ml = 9.4L
- 5) 1,200ml = \_\_\_\_ L
  
- 6) 6,100g = \_\_\_\_ kg
- 7) 8,400g = \_\_\_\_ kg
- 8) \_\_\_\_ g = 5.6kg
- 9) 3,120g = \_\_\_\_ kg
- 10) \_\_\_\_ g = 7.34kg

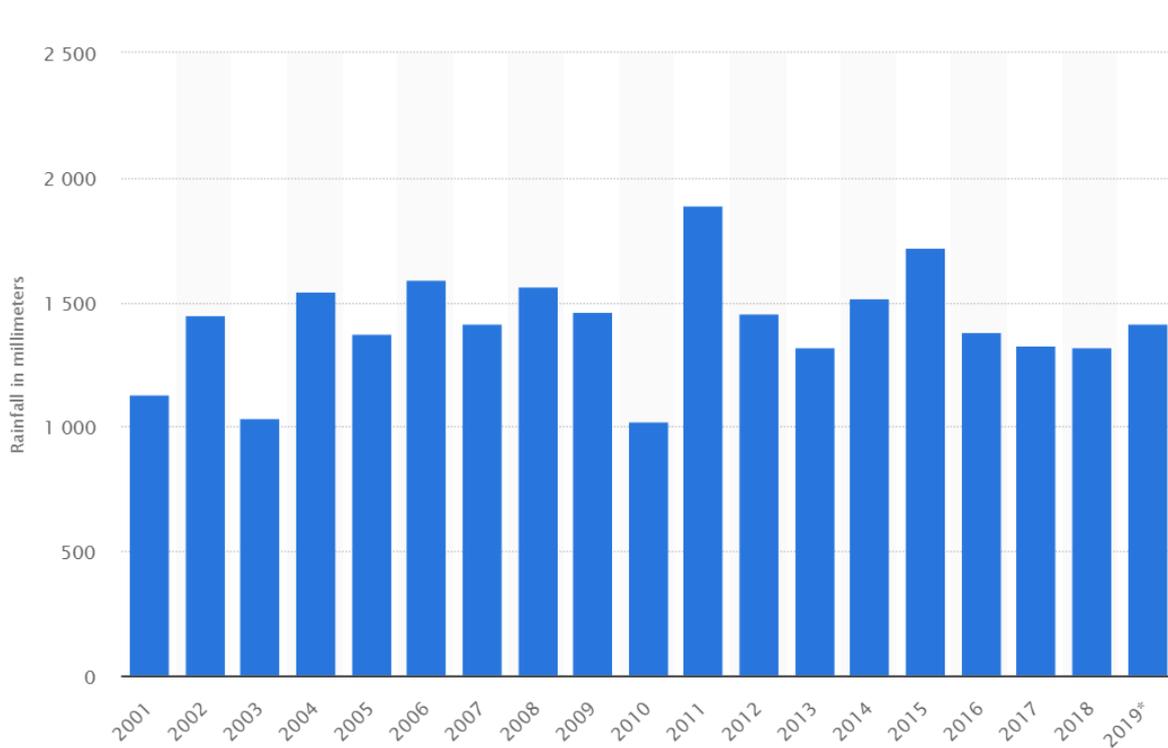
#### Challenge 2

Fill in the missing numbers below. Remember to use the key facts from the start of the lesson plan and a place value chart if you need to!

- 1) 4,780ml = \_\_\_\_ L
- 2) \_\_\_\_ ml = 8.34L
- 3) 9,073ml = \_\_\_\_ L
- 4) \_\_\_\_ ml = 9.01L
- 5) 8,990ml = \_\_\_\_ L
  
- 6) 6,940g = \_\_\_\_ kg
- 7) 8,476g = \_\_\_\_ kg
- 8) \_\_\_\_ g = 0.62kg
- 9) 803g = \_\_\_\_ kg
- 10) \_\_\_\_ g = 7.45kg

### Challenge X

- 1) 12 equal bottles of water contained 72L of water altogether. How much water did one bottle contain? Record your answer in millilitres.
- 2) Look at the graph below.
  - a) Which year had a rainfall closest to one and a half litres?
  - b) Which year had rainfall of around double 0.95L?





## Mark Scheme – Lesson 3

<u>Independent Tasks</u>
<u>Challenge 1</u> 1) 2,000ml = 2L 2) 7,200ml = 7.2L 3) 4,900ml = 4.9 L 4) 9,400ml = 9.4L 5) 1,200ml = 1.2 L  6) 6,100g = 6.1 kg 7) 8,400g = 8.4 kg 8) 5,600 g = 5.6 kg 9) 3,120g = 3.12 kg 10) 7,340 g = 7.34 kg
<u>Challenge 2</u>  1) 4,780ml = 4.78 L 2) 8,340 ml = 8.34L 3) 9,073ml = 9.073 L 4) 9,010 ml = 9.01L 5) 8,990 ml = 8.99 L  6) 6,940g = 6.94 kg 7) 8,476g = 8.476 kg 8) 620 g = 0.62 kg 9) 803g = 0.803 kg 10) 7,450 g = 7.45kg
<u>Challenge X</u> 1) Each bottle contained 6,000ml. 2) A) 2014 B) 2011

**Lesson 4**

<p>Learning Intention:</p> <p>WALT convert hours to minutes</p>	<p>Key Vocabulary:</p>	<p>What you will need:</p> <p>A computer, tablet or phone for the starter          Maths book          Pencil and ruler          Video: Year 4 Maths – S2 Week 4 - lesson 4</p>
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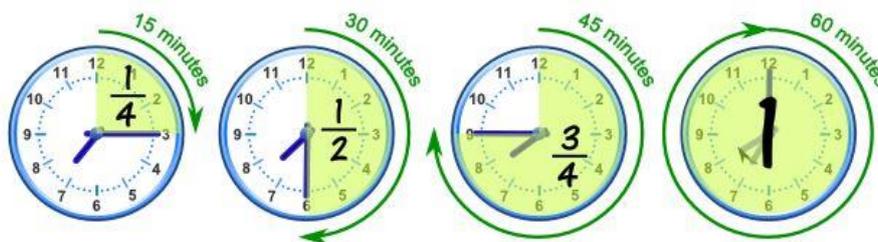
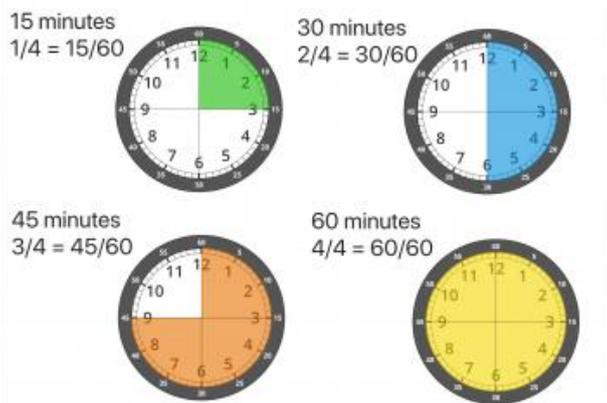
**Starter**

Log into Times Table Rock Stars and complete a gig if it is available. If not, challenge someone to a rock slam!

**Main Teaching**

We are going to spend the next two days looking at time. You may want to revise the key facts below and refer back to them if you get stuck:

1 hour = 60 minutes  
 Half an hour = 30 minutes  
 A quarter of an hour = 15 minutes  
 Three quarters of an hour = 45 minutes



Remember that each section of a clock between the large numbers is worth 5 minutes!

### Example 1

**Yasmin spent 4 and a half hours doing revision for her test. How many minutes did she revise for?**

What we need to do first is convert each hour into minutes. In this example, we have 4 hours which is 4 lots of 60 minutes.

4 x 60 is a little tricky. We can make the calculation 10 times smaller first to help.

$$4 \times 6 = 24$$

Then, we make the answer ten times bigger.  $24 \times 10 = 240$ .

$$4 \text{ hours} = 240 \text{ minutes.}$$

We then have the half an hour to add on, which is 30 minutes.

$$240 + 30 = 270.$$

Yasmin spent 270 minutes revising.

#### Top Tip

Your 60 times table will help you with these questions.

Your 60 times table is the same as your 6 times table, just ten times bigger!

### Example 2

**A train journey from London to Penzance took 6 hours and 41 minutes. How many minutes was this?**

What we need to do first is convert each hour into minutes. In this example, we have 6 hours which is 6 lots of 60 minutes.

6 x 60 is harder than normal to calculate.

Make the calculation ten times smaller:  $6 \times 6 = 36$

Make the answer ten times bigger:  $36 \times 10 = 360$ .

$$6 \text{ hours} = 360 \text{ minutes.}$$

We then have the 41 minutes to add on.

$$360 + 41 = 401.$$

The train journey took 401 minutes.



## Independent Tasks

Please complete 1 or 2 challenges. If you are finding a challenge too tricky or too easy after 3 questions, you should switch challenges. After you have completed your challenge, check your answers against the mark scheme. If you got an answer wrong, look carefully and identify where you made a mistake.

### Challenge 1

Convert the times below to minutes only. You may want to write out your 60 times table before you start.

- 1) 3 hours
- 2) 5 hours
- 3) 2 hours 40 minutes
- 4) 3 and a 20 minutes
- 5) 4 hours

Complete the worded questions below.

- 6) Nina had to queue for 2 hours and 23 minutes for a rollercoaster ride. How many minutes was she waiting for?
- 7) Jane watched three Harry Potter films. In total, she spent 5 hours and 19 minutes watching the films. In just minutes, how long was she watching the films?

### Challenge 2

Convert the times below to minutes only. You may want to write out your 60 times table before you start.

- 1) 2 hours 18 minutes
- 2) 6 hours and 40 minutes
- 3) 3 and a half hours
- 4) 2 and a quarter hours
- 5) Double 2 hours 13 minutes

Complete the worded questions below.

- 6) Nina had to queue for 3 hours and 53 minutes for a rollercoaster ride. How many minutes was she waiting for?
- 7) Jane watched all the Harry Potter films. In total, she spent 11 hours and 57 minutes watching the films. In just minutes, how long was she watching the films?

### Challenge X

You arrive at school at 8.35am. You leave school at 3.05pm. How many minutes are you at school for each day?



## Mark Scheme – Lesson 4

Independent Tasks
<b>Challenge 1</b>
1) 180 minutes 2) 300 minutes 3) 160 minutes 4) 200 minutes 5) 240 minutes
Complete the worded questions below.
6) Nina was waiting for 143 minutes. 7) Jane was watching the films for 319 minutes.
<b>Challenge 2</b>
1) 148 minutes 2) 400 minutes 3) 210 minutes 4) 135 minutes 5) 266 minutes
Complete the worded questions below.
6) Nina was waiting for 233 minutes. 7) Jane was watching the films for 717minutes.
<b>Challenge X</b>
You arrive at school at 8.35am. You leave school at 3.05pm. How many minutes are you at school for each day?
6 hours 30 min = 390 minutes

### Marking support

- 1 hour = 60 min
- 2 hours = 120 min
- 3 hours = 180 min
- 4 hours = 240 min
- 5 hours = 300 min
- 6 hours = 360 min
- 7 hours = 420 min
- 8 hours = 480 min
- 9 hours = 540 min
- 10 hours = 600 min
- 11 hours = 660 min
- 12 hours = 720 min



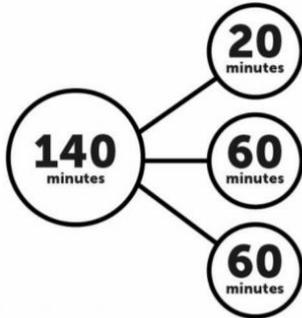
Lesson 5		
Learning Intention:  WALT convert minutes to hours	Key Vocabulary:	What you will need:  A computer, tablet or phone for the starter Maths book Pencil and ruler Video: Year 4 Maths – S2 Week 4 - lesson 5
Starter		
Log into Times Table Rock Stars and complete a gig if it is available. If not, challenge someone to a rock slam! Complete a studio session.		
Main Teaching		
For today's lesson, you will still need the same key facts as yesterday.  $1 \text{ hour} = 60 \text{ minutes}$ $\text{Half an hour} = 30 \text{ minutes}$ $\text{A quarter of an hour} = 15 \text{ minutes}$ $\text{Three quarters of an hour} = 45 \text{ minutes}$  What may help you further today is the use of your 60 times table to help you with your regrouping of minutes into hours to ensure you get the correct amount of hours out of your amount.  $1 \times 60 = 60 \text{ min}$ $2 \times 60 = 120 \text{ min}$ $3 \times 60 = 180 \text{ min}$ $4 \times 60 = 240 \text{ min}$ $5 \times 60 = 300 \text{ min}$ $6 \times 60 = 360 \text{ min}$ $7 \times 60 = 420 \text{ min}$ $8 \times 60 = 480 \text{ min}$ $9 \times 60 = 540 \text{ min}$ $10 \times 60 = 600 \text{ min}$ $11 \times 60 = 660 \text{ min}$ $12 \times 60 = 720 \text{ min}$		

### Example 1

#### Convert 140 minutes into hours and minutes.

Our first step is to see how many groups of 60 minutes we can get out of our original number. This would tell us how many full hours we can make.

Our next step is to see how many minutes are left over, after taking out the groups of 60. This will tell us our amount of minutes in our answer.



Here, we have 2 lots of 60 and then 20 minutes left over.

140 minutes = 2 hours and 20 minutes.

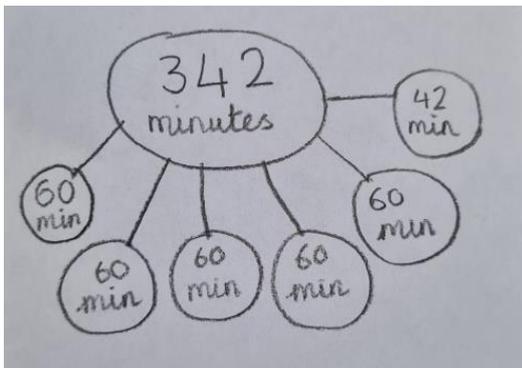
You may have also known that  $2 \times 60$  is 120 and  $3 \times 60$  is 180 so you may have used that knowledge to go straight to 2 hours and then found your left over minutes.

### Example 2

#### A flight took 342 minutes to reach its destination. How many hours and minutes was that?

Our first step is to see how many groups of 60 minutes we can get out of our original number. This would tell us how many full hours we can make. We can get 5 groups of 60 from 342. We would have used 300 minutes.

Our next step is to see how many minutes are left over, after taking out the groups of 60. This will tell us our amount of minutes in our answer. We have 42 minutes left after using the 300 for our groups of 60.



Here, we have 5 groups of 60 minutes (which has used 300 minutes) totalling 5 hours. We then have 42 minutes left over.

342 min = 5 hours 42 minutes

The flight took 5 hours and 42 minutes to reach its destination.

### Independent Tasks

Please complete 1 or 2 challenges. If you are finding a challenge too tricky or too easy after 3 questions, you should switch challenges. After you have completed your challenge, check your answers against the mark scheme. If you got an answer wrong, look carefully and identify where you made a mistake.

#### Challenge 1

Using the key facts and the 60 times table to help you, convert each of the minute amounts below to hours and minutes.

- 1) 72 minutes
- 2) 130 minutes
- 3) 315 minutes
- 4) 620 minutes
- 5) 245 minutes
- 6) 313 minutes

Complete the worded problems below:

- 7) It took Darren a total of 195 minutes to cut the Hunter family's hair. How long did it take him in hours and minutes?
- 8) The Queen's chef took 257 minutes preparing The Queen's dinner. How long was this in minutes and hours?

#### Challenge 2

Using the key facts and the 60 times table to help you, convert each of the minute amounts below to hours and minutes.

- 1) 98 minutes
- 2) 431 minutes
- 3) 668 minutes
- 4) 456 minutes
- 5) 329 minutes
- 6) 734 minutes

Complete the worded problems below:

- 7) It took Darren a total of 237 minutes to cut the Hunter family's hair. How long did it take him in hours and minutes?
- 8) The Queen's chef took 408 minutes preparing The Queen's dinner. How long was this in minutes and hours?

#### Challenge X

An athlete sticks to a very tight training schedule. She starts every morning at 7.30am. She runs for 134 minutes. She then stops for a rest for 17 minutes. She then does sprints for 22 minutes and has a rest after for 6 minutes. Her third activity is swimming. She swims for 172 minutes. She is then allowed to stop for lunch after she has showered and got dressed, which takes her three quarters of an hour.

When does she stop for lunch?



## Mark Scheme – Lesson 5

Independent Tasks
<b>Challenge 1</b>
1) 1 hour and 12 minutes 2) 2 hours and 10 minutes 3) 5 hours and 15 minutes 4) 10 hours and 20 minutes 5) 4 hours and 5 minutes 6) 5 hours and 13 minutes
Complete the worded problems below:  7) It took Darren 3 hours and 15 minutes. 8) The Queen's chef took 4 hours and 17 minutes to prepare The Queen's dinner.
<b>Challenge 2</b>
1) 1 hour and 38 minutes 2) 7 hours and 11 minutes 3) 11 hours and 8 minutes 4) 6 hours and 36 minutes 5) 5 hours and 29 minutes 6) 12 hours and 14 minutes
Complete the worded problems below:  7) It took Darren 3 hours and 57 minutes. 8) The Queen's chef took 6 hours and 48 minutes preparing The Queen's dinner.
<b>Challenge X</b>
She stops for lunch at 2.06pm.  If you add all the minutes up, you get a total of 396. This is 6 hours and 36 minutes.  6 hours and 36 minutes on from 7.30am is 2.06pm.