

Maths

Lesson 1

LO: To convert between minutes and seconds.

What can you do in a minute?

How many times can you write your name in a minute?

How many star jumps can you do in a minute?

How do we work out how many seconds in 2 minutes?

What calculation do you have to do?

So if 1 minute = 60 seconds, 2 minutes would be  $2 \times 60 = 120$  seconds.

REMEMBER: You can work out  $2 \times 6 = 12$  first and then make the answer 10 times bigger as you want to know the answer to  $2 \times 60$ .

Talk and Share

3 minutes =  $3 \times 60$  seconds = 180 seconds

4 minutes =

5 minutes =

10 minutes =

E4E  $2 \frac{1}{2}$  minutes =

What if you wanted to convert seconds to minutes?

What calculation would you need to do?

E.g. 120 seconds = 2 minutes

Work out  $12 \div 6 = 2$

$$120 \div 60 = 2$$

Activity

Complete the questions and remember to show your working out.

1) convert to seconds

- 7 minutes
- 9 minutes
- 12 minutes
- 20 minutes

2) convert to minutes

- 360 seconds
- 480 seconds
- 660 seconds

Answers

1) convert to seconds

- 7 minutes = 420 seconds
- 9 minutes = 540 seconds
- 12 minutes = 720 seconds
- 20 minutes = 1200 seconds

2) convert to minutes

- 360 seconds = 6 minutes
- 480 seconds = 8 minutes
- 660 seconds = 11 minutes

Lesson 2

LO: To convert between hours and minutes.

What can you do in an hour?

How is this different to what you can do in a minute?

How do we work out how many minutes in 2 hours?

What calculation do you need to do?

What mental strategy do we use?

Remember - there are 60 minutes in 1 hour. Use your knowledge of the 6 x tables and then multiply the answer by 10 so its ten times bigger.

$$\frac{1}{2} \text{ hour} = 30 \text{ minutes}$$

$$1 \text{ hour} = 60 \text{ minutes}$$

$$1 \frac{1}{2} \text{ hours} = 90 \text{ minutes}$$

$$2 \text{ hours} = 120 \text{ minutes}$$

$$2 \frac{1}{2} = 150 \text{ minutes}$$

$$10 \text{ hours} = ?$$

$$12 \text{ hours} = ?$$

$$20 \text{ hours} = ?$$

$$24 \text{ hours} = ?$$

$$10 \text{ hours} \times 60 \text{ minutes} = 600 \text{ minutes}$$

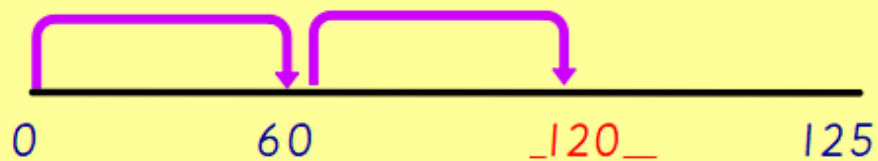
12 hours  $\times$  60 minutes = 720 minutes - you could work out  $12 \times 6$  first and then multiply the answer by 10.

$$20 \text{ hours} \times 60 \text{ minutes} = 2 \times 60 = 120 \times 10 = 1200 \text{ minutes}$$

$$24 \text{ hours} \times 60 \text{ minutes} = 24 \times 6 \text{ (using grid method)} = 144 \times 10 = 1440 \text{ minutes.}$$

You can use a number line to help you too: How many hours and minutes in 125 minutes?

125 minutes = 2 hours and 5 minutes



Calculate the conversions using your times tables to help you and a number line if you need to.

Option 1

Option 2

Convert to minutes

- 5 hours = mins
- 6 hours
- 10 hours

Convert to minutes

- 5 hours
- 6½ hours
- 12 hours

Convert to hours + mins

- 120 minutes = hours
- 180 minutes
- 200 minutes \_\_\_ hours  
and \_\_\_ mins

Convert to hours + mins

- 150 minutes
- 220 minutes
- 630 minutes

ANSWERS:

option 1	Convert to minutes	Convert to minutes	option 2
	- 5 hours 300 mins	- 5 hours	
	- 6 hours 360 mins	- 6½ hours 390 mins	
	- 10 hours 600 mins	- 12 hours 720 mins	
	Convert to hours + mins	Convert to hours + mins	
	- 120 minutes 2 hours	- 150 minutes 2 hours 30 mins	
	- 180 minutes 3 hours	- 220 minutes 3 hours 40 mins	
	- 200 minutes 3 hours 20 minutes	- 630 minutes 10 hours 30 mins	

Lesson 3

LO: To understand how to solve problems involving conversion of time.

Recap:

- 1 hour = 60 minutes
- 1 minute = 60 seconds
- 2 hours = 120 minutes
- 3 minutes = 180 seconds

Think about how you would solve this word problem:

Rebecca goes walking for 2 hours 37 minutes. How many minutes has she been **walking**?

So you would work out how many minutes there are in 2 hours = 120 minutes and then add the 37 minutes on.

$$120 + 37 = 157 \text{ minutes.}$$

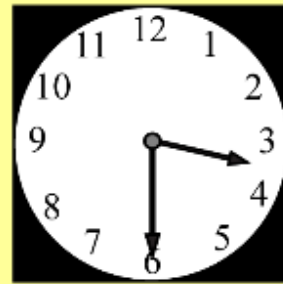
Rebecca has been walking for 157 minutes.

### Activity

Complete at least three questions. Make sure you do at least one of each colour.

### Lesson 4

LO: To understand how to solve problems involving time.



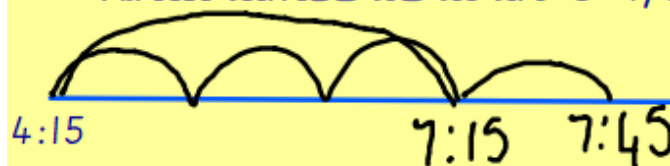
How many hours have passed between these two times? How many minutes?

It was 12.30 and is now 3.30. That means 3 hours have passed.  $3 \text{ hours} \times 60 \text{ minutes} = 180 \text{ minutes.}$

If it is 4.15 now, what will the time be in 3 hours?

What about in  $3 \frac{1}{2}$  hours? You can use a number line to help.

What times is it in  $3 \frac{1}{2}$  hours?



## Develop Learning

It is 7.30am. It takes 1 hour 45 minutes to walk to the shops.

What time will you arrive?



I can

### Activity

Solve the questions in your book. Make sure you draw a number line to help solve them.

### Lesson 5

LO: To understand how to solve problems involving time.

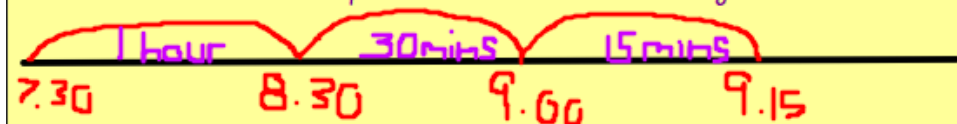
Look at these two questions - think about how they are the same/different.

It is 7.30am. It takes 1 hour 45 minutes to walk to the shops. What time will you arrive?

Ruby arrived at the library at 11.50. She left the library at 14.05. How long did she spend there?

1)

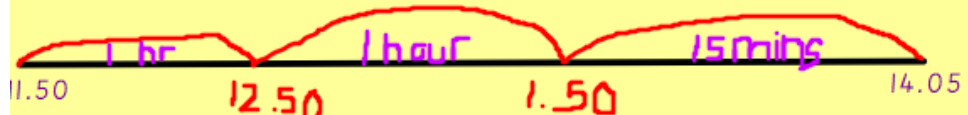
It is 7.30am. It takes 1 hour 45 minutes to walk to the shops. What time will you arrive?



You arrive at 9.15am.

2)

Ruby arrived at the library at 11.50. She left the library at 14.05. How long did she spend there?



	<p>Ruby spent 2 hours and 15 minutes at the library.</p>
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Activity

Answer the questions and make sure you use a number line to help solve them.

**Week 10 Maths Activities**