

MATHS

Hi Banksy and Shonibare!

Every day, we'll be providing Maths activities to keep all of your Maths skills alive. Remember to also make time for TTRS and Mathletics – **these should be accessed daily.**



<https://play.ttrockstars.com/auth>



<https://login.mathletics.com/>

Maths Topic Overview: Measurement of Time

This week, we'll be focusing on **standard units of time.**

We'll be learning how to convert from larger units of time to a smaller unit and vice versa and how to solve problems involving time. We'll practise the skill of breaking down complex problems into simpler, more manageable steps.

By the end of the week, could you create and email a problem for your teacher to solve?

Scroll all the way to the end to find useful posters to help you with time.

Happy learning!

Miss Arnold & Ms Berry

Lesson 1

Get your brain going with 1 game in the **GARAGE** on **RockStars!**

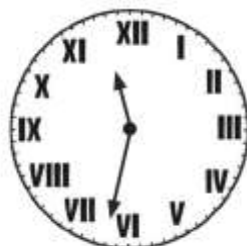
Warm up!

This week is all about time, so let's start with making sure we're comfortable with **reading an analogue clock.** Can you read these times?

You can watch these videos to refresh your memory on how to tell the time!

<https://youtu.be/3Posbu-VKxU>

https://www.youtube.com/watch?v=p_4eFPYWqjE



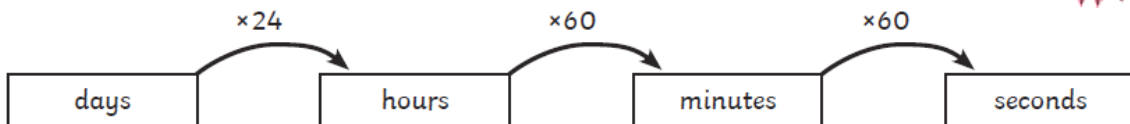
Today we'll be revising how to **convert between standard units of time**.

Work through the PowerPoint Yr6 **Maths su2 wk3 presentation 1** to develop your understanding of how to convert between units of time.

Remember to put the PowerPoint in presentation mode by clicking on this icon in the bottom right hand corner.



When you're feeling ready, have a go at the activities below!



To make multiplying by 24 easier, we could multiply by 12, then multiply by 2.

1. Convert these days to hours:

2 days	
3 days	
4 days	
5 days	
6 days	

To make multiplying by 60 easier, we could multiply by 6, then by 10.

2. Convert these hours to minutes:

2 hours	
3 hours	
4 hours	
5 hours	
6 hours	

To make multiplying by 60 easier, we could multiply by 6, then by 10.

3. Convert these minutes to seconds:

3 minutes	
5 minutes	
2 minutes	
6 minutes	
4 minutes	



To convert from days to minutes, we would need to multiply by 24, then by 60. To make this easier, we could do the following: $\times 12 \times 2 \times 6 \times 10$.

4. Convert the following from days to minutes:

1 day	
2 days	
3 days	

5. A brother and sister are counting the time it took to finish a computer game. Jaswinder says he finished the game in $3\frac{1}{2}$ hours and his sister Satnam says it took her 200 minutes. Satnam says she finished in less time than her brother. Was she correct? Explain how you know.

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3. Order these time measurements from shortest time to longest time:

a. 2 days 38 hours 1000 minutes

b. 4 hours 200 minutes 12 500 seconds

4. Joe completed a jigsaw puzzle in $2\frac{1}{4}$ hours on Saturday. The next day, his friend Dan completed it in 23 fewer minutes. If Dan started the puzzle at 10 a.m. on Sunday, what time did he complete it?

Convert these mixed-unit measurements to the unit shown.



a)	5 days 22 hours	hours
b)	6 hours 43 minutes	minutes
c)	8 minutes 17 seconds	seconds
d)	3 hours 25 minutes	minutes
e)	6 minutes 18 seconds	seconds
f)	8 days 21 hours	hours

Jaden rode his bike for 4 hours 45 minutes. His friend Bobby, converted his time into seconds and said he rode his bike for 14 400 seconds. "I rode my bike for more than 30 minutes longer than you," Jaden told Bobby. Is Jaden correct? Explain how you know.

Lesson 2

Improve your rock speed with 1 game in the **STUDIO** on **RockStars!**

Warm Up!

Is this a sensible statement?
Explain your answer.



At the end of his school day, Craig tells his mum that he was at school for 25 000 seconds. Is this a sensible statement?



Today we'll continue to **apply our knowledge of dividing, multiplying and our multiplication facts to convert standard units of time.** Work through PowerPoint **Yr6 Maths su2 wk3 presentation 2.**

Remember to put the PowerPoint in presentation mode by clicking on this icon in the bottom right hand corner.



Ready? Have a go at completing the activities on the following pages!

Use this table to help you work out your conversions.

Multiples of 24		Multiples of 60	
1 × 24	24	1 × 60	60
2 × 24	48	2 × 60	120
3 × 24	72	3 × 60	180
4 × 24	96	4 × 60	240
5 × 24	120	5 × 60	300
6 × 24	144	6 × 60	360
7 × 24	168	7 × 60	420
8 × 24	192	8 × 60	480
9 × 24	216	9 × 60	540
10 × 24	240	10 × 60	600



Convert days into hours by dividing by 24.

a) 96 hours	days
b) 288 hours	days

c) 192 hours	days
d) 264 hours	days

Convert seconds into minutes by dividing by 60.

2. Convert days to hours by dividing by 60.

a) 600 seconds	minutes
b) 120 seconds	minutes

c) 720 seconds	minutes
d) 660 seconds	minutes

Convert minutes into hours.

3. Convert minutes to hours. Which list of multiples will you need to use?

a) 60 minutes	hours
b) 180 minutes	hours

c) 240 minutes	hours
d) 300 minutes	hours

Which list of multiples will you need to use?



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These conversions are mixed up, so look at each one carefully.



a) 216 hours	days
b) 360 minutes	hours
c) 600 seconds	minutes

d) 420 minutes	hours
e) 300 seconds	minutes
f) 168 hours	days

5. On Monday, Billie did homework for 1 hour 25 minutes. On Tuesday, she did homework for 75 minutes. She said she had worked longer on Monday than Tuesday. Was she right? Show how you know.

Convert the following. Can you check that your answers are correct?



Here's an **example** for you to follow:

Convert 65 hours into days.

I know that there are **24 hours in 1 day.**

Using the multiplication table I can see that there are **48 hours in 2 days.**

65 hours is less than 72 so it can't be more 3 days.

I therefore know that **65 hours is 2 days and ? hours.**

To find the hours, I must **subtract 65 from 48 (2 days).**

$$65 - 48 = 17$$

So the answer is **2 days and 17 hours.**

Multiples of 24	
1 × 24	24
2 × 24	48
3 × 24	72
4 × 24	96
5 × 24	120
6 × 24	144
7 × 24	168
8 × 24	192
9 × 24	216
10 × 24	240

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Now it's your turn!

			Check
a)	50 hours	_____ days _____ hours	
b)	190 minutes	_____ hours _____ minutes	
c)	425 seconds	_____ minutes _____ seconds	
d)	116 hours	_____ days _____ hours	
e)	684 minutes	_____ hours _____ minutes	

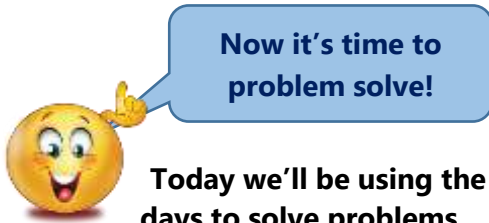
Here is a page of Harvinder's homework. He thinks he will get at least 4 correct out of 6. Mark his work!

	Question	Answer
1)	300 minutes	5 hours
2)	192 hours	7 days
3)	240 seconds	4 minutes
4)	125 hours	5 days 2 hours
5)	315 minutes	5 hours 15 minutes
6)	130 seconds	2 minutes 10 seconds

Did Harvinder achieve his target? _____

Lesson 3

Get your brain going with 1 game in the **GARAGE** on **RockStars!**



Today we'll be using the skills we've been practising over the past two days to solve problems.

It's time to pair up again!



Work through PowerPoint **Yr6 Maths su2 wk2 presentation 3**.

The PowerPoint will **guide you through how to break down complex problems into smaller steps**.

You'll also find **problems in the PowerPoint for you to have a go together**.

Remember to put the PowerPoint in presentation mode by clicking on this icon in the bottom right hand corner.



Note: You'll be using what you learn today to solve some more problems tomorrow, so **carefully** follow the steps you see!

Lesson 4

Get your brain going with 1 game in the **GARAGE** on **RockStars!**

Well done for the all you have achieved this week.

Before you check out the games below, have a go at solving the following problems.

Two friends have been training for long-distance running. Cassie has counted the time she trained for in hours and minutes and Safina has counted her time in minutes.

Cassie completed 2 hours 30 minutes in the week. Safina did 185 minutes. Who trained for the longest time and for how much longer?



Petra has recorded the time she has spent in training. Here is the time on her stopwatch at the end of the week:



How many seconds have passed since the stopwatch started?

Why not have a go at some of the *Telling the Time* games *Top Marks!*

<https://www.topmarks.co.uk/Search.aspx?q=telling+time>

Converting Time Units

60 seconds	1 minute
60 minutes	1 hour
24 hours	1 day
7 days	1 week
365 days	1 year
366 days	1 leap year
52 weeks	1 year



Units of Time

<p>Minute</p> <p>1 minute = 60 seconds</p>	<p>Hour</p> <p>1 hour = 60 minutes</p>	<p>Day</p> <p>1 day = 24 hours</p>	<p>Week</p> <p>1 week = 7 days</p>	<p>Fortnight</p> <p>1 fortnight = 2 weeks</p>	<p>Month</p> <p>January = 31 days February = 28 days (29 in a leap year) March = 31 days April = 30 days May = 31 days June = 30 days July = 31 days August = 31 days September = 30 days October = 31 days November = 30 days December = 31 days</p>
<p>Year</p> <p>1 year = 12 months = 52 weeks = 365 days</p>	<p>Leap Year</p> <p>1 leap year = 366 days</p>	<p>Decade</p> <p>1 decade = 10 years</p>	<p>Century</p> <p>1 century = 100 years</p>	<p>Millennium</p> <p>1 millennium = 1000 years</p>	

12 and 24-Hour Reference

12-hour time	24-hour time
12 a.m. (midnight)	00:00
1 a.m.	01:00
2 a.m.	02:00
3 a.m.	03:00
4 a.m.	04:00
5 a.m.	05:00
6 a.m.	06:00
7 a.m.	07:00
8 a.m.	08:00
9 a.m.	09:00
10 a.m.	10:00
11 a.m.	11:00
12 p.m. (noon)	12:00
1 p.m.	13:00
2 p.m.	14:00
3 p.m.	15:00
4 p.m.	16:00
5 p.m.	17:00
6 p.m.	18:00
7 p.m.	19:00
8 p.m.	20:00
9 p.m.	21:00
10 p.m.	22:00
11 p.m.	23:00