THIRD SPACE LEARNING

HELLO!

Today we are going to revise time

THIRD SPACE LEARNING

Arithmetic Warm Up

Fill in the box with a =, < or > symbol to make the statement true

1. 24 days ☐ 10 weeks

2. 1 month ☐ 240 hours

3. What is 644 minutes in hours and minutes?

☐ hours ☐ minutes

THIRD SPACE LEARNING

Revision on time

Today we are going to revise how to

- read, write and convert between analogue and digital clocks
- solve time problems

12 and 24 hour time

Main differences between writing times in 24-hour and 12-hour clock

24 hour clock	12 hour clock
05:10	5:10AM
14:10	2:10PM
1. Numbers 0-23	Numbers 1 - 12
2. Zero in front	No zeroes in front
3. No AM or PM	AM and PM

24 hour clock	12 hour clock
00:10	**12:10 AM**
01:10	1:10 AM
02:10	2:10 AM
03:10	3:10 AM
04:10	4:10 AM
05:10	5:10 AM
06:10	6:10 AM
07:10	7:10 AM
08:10	8:10 AM
09:10	9:10 AM
10:10	10:10 AM
11:10	11:10 AM
12:10	**12:10 PM**
13:10	1:10 PM
14:10	2:10 PM
15:10	3:10 PM
16:10	4:10 PM
17:10	5:10 PM
18:10	6:10 PM
19:10	7:10 PM
20:10	8:10 PM
21:10	9:10 PM
22:10	10:10 PM
23:10	11:10 PM

Convert these to either 12 or 24 hour times

11:10 = _____

9:10pm = _____

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Revision: Solving time problems

Match each time problem with the correct calculation you need to do and write what unit each answer would be in.

1 Milly takes 11 seconds to do one sum. How long does it take her to do 8 sums?

11 – 8 = ☐ Units: ☐

2 Ella runs for 8 minutes then walks for 11 minutes. How long is this altogether?

8 × 11 = ☐ Units: ☐

3 Ben gets on the bus at 10.08 and gets off again at 10.11. How long was he on the bus for?

8 + 11 = ☐ Units: ☐

Revision: Solving time problems

Jenny leaves the house at 09.36 and arrives at her friend's house at 10.18. How many minutes did it take her?

What are the important words and numbers in the question?

What units are in the question?

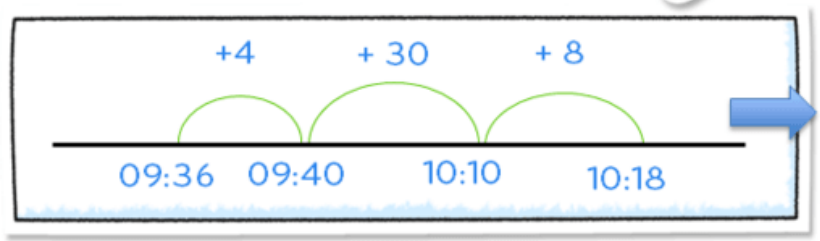
What units do we need for the answer?

What calculation do we need to do?

You **cannot** subtract times to find the difference.

10:18
- 09:36
00:82

A time line, like a number line, can be useful when finding durations or to check our answer.



mins

Question 2

Complete

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

A clock shows 13:25 and is $\frac{3}{4}$ hour slow.

Write the actual time in 12 hour time.

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Question 3

Complete

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Here is part of the bus timetable from Riverdale to Mott Haven.

Riverdale	10:02	10:12	10:31	10:48
Kingsbridge	10:11	10:21	10:38	10:55
Fordham	10:28	10:38	10:54	11:11
Tremont	10:36	10:44	11:00	11:17
Mott Haven	10:53	11:01	11:17	11:34

How many minutes does it take the 10:31 bus from Riverdale to reach Mott Haven?

minutes

Mr Evans is at Fordham at 10:30

What is the **earliest** time he can reach Tremont on the bus?

THIRD SPACE LEARNING

Let's review:

- read, write and convert between analogue and digital clocks
- solve time problems

Draw a circle around the smiley face to show how you feel about what we've just been doing.



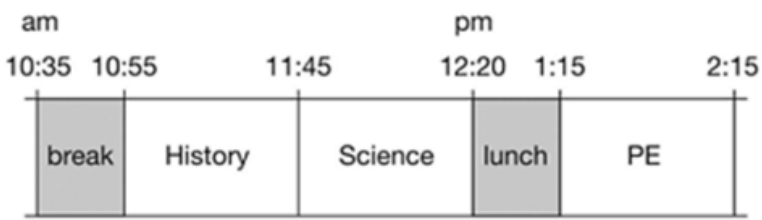
THIRD SPACE LEARNING

CHALLENGE

Use the space provided to complete the following question.

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Here is part of the timetable for Class 6 on a Monday.



Look at the timetable.

How long is it from the **end** of break to the **start** of lunch?

60 minutes in an hour

How many minutes in half an hour?

Converting units of time

Complete these time conversions.

- minutes to seconds × by 60.
- seconds to minutes ÷ by 60.
- hours to minutes × by 60.
- minutes to hours ÷ by ☐
- weeks to days ☐ by ☐
- days to weeks ☐ by ☐
- years to months ☐ by ☐
- months to years ☐ by ☐

Converting units of time

Try these:

1. 5 weeks = ☐ days
2. 180 seconds = ☐ minutes
3. 5 minutes = ☐ seconds
4. 84 days = ☐ weeks
5. 6 years = ☐ months

Converting 12-hour clock to 24-hour clock

The rules: For the first hour of the day (12 midnight to 12.59am), subtract 12 hours.

12-hour clock	24-hour clock
12 midnight	00.00
12.18am	00.18
12.59am	

From 1.00am to 12.59pm, no change except to take off the am or pm and make sure time is written as 4 digits.

12-hour clock	24-hour clock
11.54am	11.54
9.06am	09.06
3.58am	

Converting 12-hour clock to 24-hour clock

From 1.00pm to 11.59pm, add '12' to the hour and take off the pm.

12-hour clock		24-hour clock
1.00pm	1 + 12 = 13	13.00
6.38pm	6 + 12 = 18	
9.15pm		

Converting 24-hour clock to 12-hour clock

The rules:

For the first hour of the day (00.00 to 00.59), add 12 hours and write 'am'.

24-hour clock	12-hour clock
00.18	12.18am
00.45	

From 01.00 to 11.59 no change except to add am and, if the first digit is zero, take that off.

24-hour clock	12-hour clock
10.07	10.07am
01.32	1.32am
09.58	

Converting 24-hour clock to 12-hour clock

From 12.00 to 12.59, just add 'pm'.

24-hour clock	12-hour clock
12.00	12.00pm
12.47	

From 13.00 to 23.59, subtract 12 hours and add 'pm'.

24-hour clock		12-hour clock
14.33	14 - 12 = 2	2.33pm
18.19	18 - 12	
23.59		

Practice time

2. Match these times with the times on the 12-hour clock.

Quarter past seven in the morning	12.15pm
Quarter past noon	12.15am
Quarter past midnight	7.15am
Quarter past seven in the evening	7.15pm

Question 1

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Complete

James has a watch that shows analogue time in the evening.

Ann has a digital watch that shows the same time using 24-hour clock. What does her watch show?

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