

Maths - Activity 1

LO: To convert between analogue and digital time.

Core skill - Convert each time from and to 12-hour or 24-hour time.

Example: • 2:37am = 2:37 • 2:37pm = 14:37

1. 8:15am = _____
2. _____ = 6:49
3. 3:23pm = _____
4. _____pm = 17:21
5. _____ = 22:54
6. 8:20pm = _____
7. 1:16am = _____
8. _____ = 0:28

Depth task - Order these times from earliest to latest.

Example: • 2:37am, 3:25, 11:47, 1:53pm, 4:28pm.

1. 9:37pm, 9:37, 15:37, 5:37pm, 3:37.
2. 23:43, 2:34, 2:34pm, 3:43pm, 3:43.
3. 10:14pm, 10:53am, 12:12am, 12:38pm, 0:45.

Greater Depth

Look at this timetable.

Road Trip USA Day One:









	12hr format	24hr format
Leave Seattle	8:15am	8:15
Arrive in Portland	9:47am	9:47
Leave Portland	10:30am	10:30
Arrive in San Francisco	5:38pm	15:38
Leave San Francisco	6:20pm	18:20
Arrive in Los Angeles	11:07pm	23:07
Los Angeles Coach Station closes	12:05am	24:05

Which times are incorrect? Explain your answers.

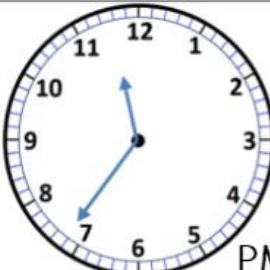
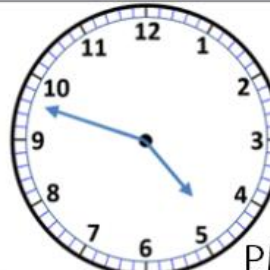



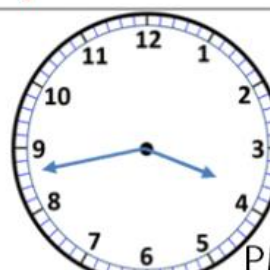


Maths - Activity 2

LO: To read and write analogue and digital times.

Core skill - Write each time in a 12-hour format

			
1:11	1)	2)	3)
			
4)	5)	6)	7)

Depth task - Write these PM times in 24-hour format.

 PM	 PM	 PM	 PM
23:36	1)	2)	3)
 PM	 PM	 PM	 PM
4)	5)	6)	7)

Greater Depth - Always, sometimes, never:



Basma says that to convert any 12-hour into 24-hour format, you add ten hours onto the 12-hour time.

Do you agree with her? Explain your reasoning.

Maths - Activity 3

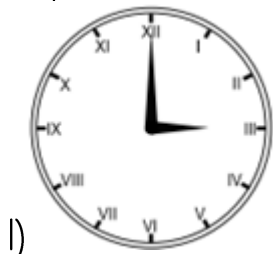
LO: To read and write time (including Roman numerals).

Core skill - Convert into and out of Roman numerals.

Remember: • 1 = I • 5 = V • 10 = X • 50 = L • 100 = C
3 = III. 4 = IV. 6 = VI.

1. 8 = _____ 2. _____ = XII 3. _____ = XVI
4. 23 = _____ 5. _____ = XXXIV 6. 40 = _____
7. 47 = _____ 8. _____ = LXI 9. 72 = _____
10. 88 = _____ 11. _____ = LXXXIX 12. _____ = XCIX

Depth Task - What time is it?



1) = _____



2) = _____



3) = _____



4) = _____



5) = _____



6) = _____

Greater Depth - Can you work out the time from these clues?

- I last checked the time this morning an hour ago.
- When I last checked the time, the hour hand pointed to IX.
- When I last checked the time, the minute hand pointed to V.

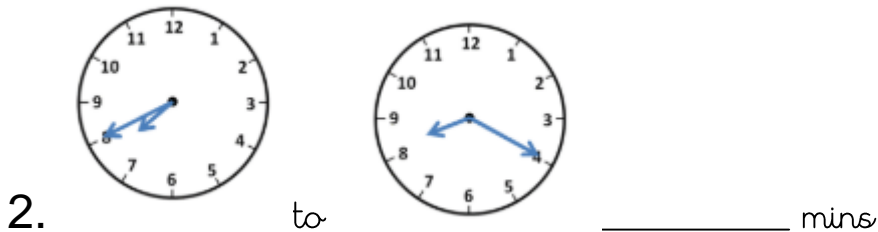
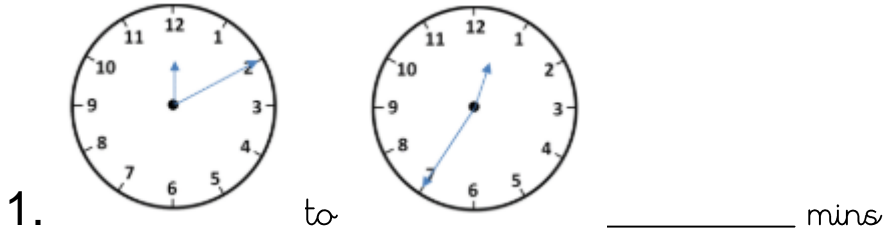
Can you write the time in a 12-hour format? ____:____(am/pm)



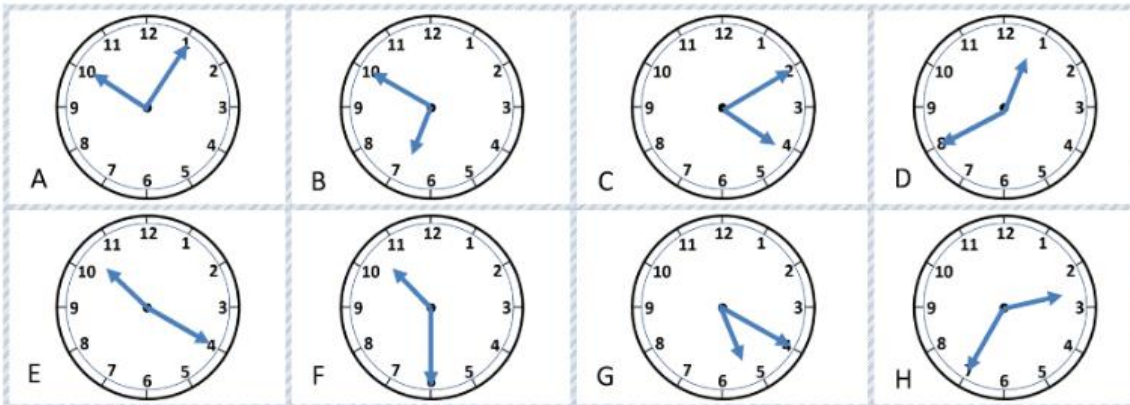
Maths - Activity 4

LO: To solve problems by converting units of time.

Core skill - Write down how many minutes have passed from the time on each clock face.



Depth Task - What time is it?



- I am between 2:00 and 11:00.
- My hour is an even number.
- My minute hand is more than halfway round the clock.
- I am 10 minutes away from an o'clock time.

What time am I? _____ which is Letter _____.

Greater Depth - Can you work out the time difference and convert successfully?

These are the start and end times on a video stream.

START 14:45

STOP 17:25

How long was the stream in hours and minutes? _____ hrs _____ mins.

Maths - Activity 5

LO: To solve problems involving the structure of the calendar.

Core skill - Use this calendar to answer all of today's time problems.

July						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
Phases of the Moon: 5:☉ 13:☾ 20:● 27:☾						
Holidays and Observances: 12: Battle of the Boyne (Northern Ireland), 13: 'Battle of the Boyne' observed (Northern Ireland)						

1. What are the dates of all the Fridays in July?
2. What is the date on the first Monday in July?
3. What is the full date four days before the 7th July?

Depth task - Use your knowledge of the months of the year to answer these problems.

4. July has 31 days. Which other months have this many days in them?
5. The Phillips family go on holiday on Friday 3rd of July. Including that Friday, they go away for fifteen days. What date is the last day of their holiday?
6. Jaskirat's birthday is on July 18th. She has her party the Friday before this. What day does Jaskirat's birthday party fall on?

Greater Depth - Can you use this calendar to answer questions about other months?

7. Write the full date for the first day of the next month.
8. How many days are there in June, July and August altogether?
9. Sunil was born in March 2009. How old is he in years and months?

Answers

Activity 1

Core skill

1. 8:15am = **8:15**
2. **6:49am** = 6:49
3. 3:23pm = **15:23**
4. **5:21pm** = 17:21
5. **10:54pm** = 22:54
6. 8:20pm = **20:20**
7. 1:16am = **1:16**
8. **12:28am** = 0:28

Depth task

1. 3:37, 9:37, 15:37, 5:37pm, 9:37pm.
2. 2:34, 3:43, 2:34pm, 3:43pm, 23:43.
3. 12:12am, 0:45, 10:53am, 12:38pm, 10:14pm.

Greater Depth









Road Trip USA Day One:

	12hr format	24hr format
Leave Seattle	8:15am	8:15
Arrive in Portland	9:47am	9:47
Leave Portland	10:30am	10:30
Arrive in San Francisco	5:38pm	15:38
Leave San Francisco	6:20pm	18:20
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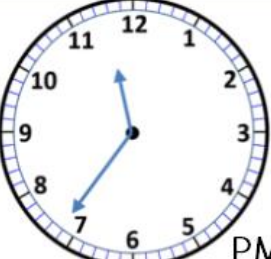




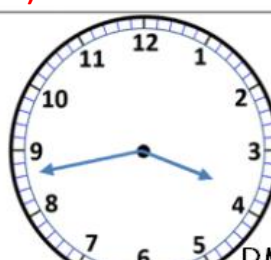


- 5:38pm does not equal 15:38. 12:05am does not equal 24:05.
5:38pm = 17:38 12:05am = 0:05
3:38pm = 15:38 There is no such thing as 24:05.

Activity 2

Core skill - Write each time in a 12-hour format.

			
1:11	1) 9:18	2) 3:47	3) 10:03
			
4) 8:24	5) 2:28	6) 7:58	7) 5:07

Depth task - Write these PM times in 24-hour format.

			
23:36	1) 16:48	2) 12:22	3) 21:23
			
4) 18:02	5) 15:43	6) 12:59	7) 22:33

Greater Depth - Always, sometimes, never:



Basma says that to convert any 12-hour into 24-hour format, you add ten hours onto the 12-hour time.

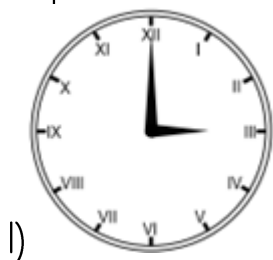
This is never true! 1pm + 10 = 11, and 11:00 isn't 1pm, it's 11am. 10pm + 10 = 20, and 20:00 isn't 10pm, it's 8pm. There are two sets of 12 hours making 24 hours, not two sets of 10 hours.

Activity 3

Core skill

1. 8 = VIII 2. 12 = XII 3. 16 = XVI
4. 23 = XXIII 5. 34 = XXXIV 6. 40 = XL
7. 47 = XLVII 8. 61 = LXI 9. 72 = LXXII
10. 88 = LXXXVIII 11. 89 = LXXXIX 12. 99 = XCIX

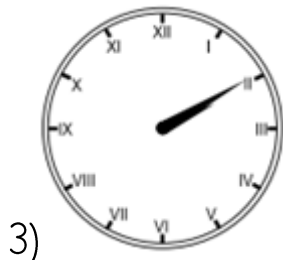
Depth Task - What time is it?



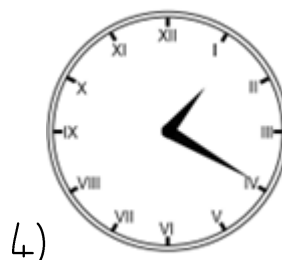
= 3:00



= 8:30



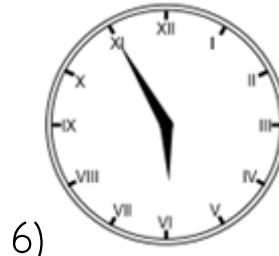
= 2:10



= 1:20



= 12:40



= 5:55

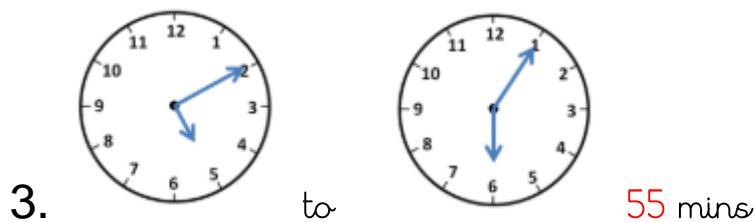
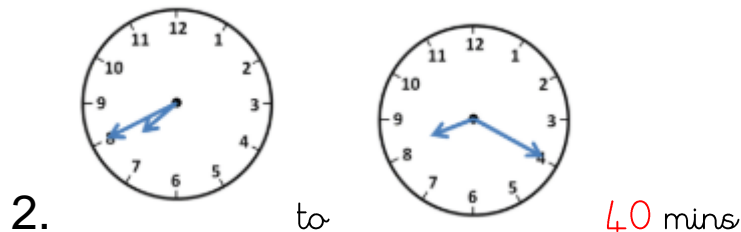
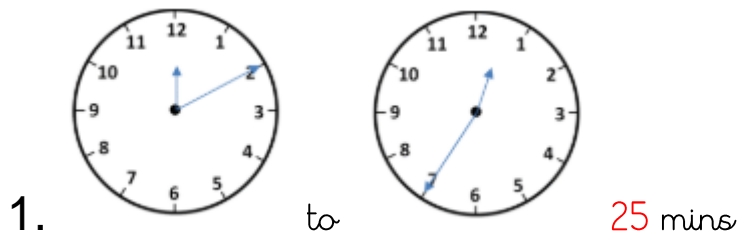
Greater Depth - Can you work out the time from these clues?

- I last checked the time *this morning* an hour ago.
- When I last checked the time, the hour hand pointed to IX. IX = 9
- When I last checked the time, the minute hand pointed to V.
V = 5, which will mean 25 minutes have past.

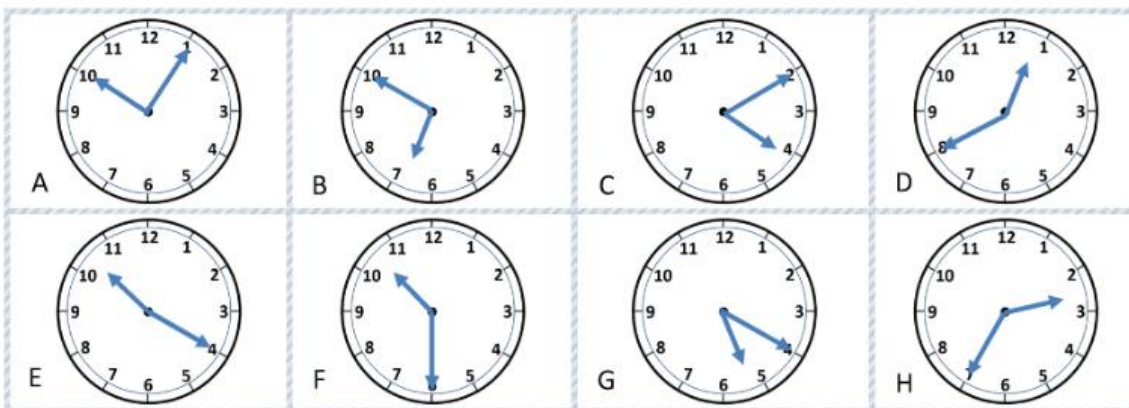
One hour after 9:25am will be 10:25am.

Activity 4

Core skill



Depth Task - What time is it?



- I am between 2:00 and 11:00.
- My hour is an even number.
- My minute hand is more than halfway round the clock.
- I am 10 minutes away from an o'clock time.

What time am I? 6:50, which is Letter B.

Greater Depth

START 14:45

STOP 17:25

How long was the stream in hours and minutes? 2hrs 40mins.

Core skill

July						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Phases of the Moon: 5:○ 13:● 20:● 27:○

Holidays and Observances: 12: Battle of the Boyne (Northern Ireland),
13: 'Battle of the Boyne' observed (Northern Ireland)

1. What are the dates of all the Fridays in July? Friday 3rd July, Friday 10th July, Friday 17th July, Friday 24th July and Friday 31st July.
2. What is the date on the first Monday in July? Monday 6th July
3. What is the full date four days before the 7th July? Friday 3rd July

Depth task

4. July has 31 days. Which other months have this many days in them? January, March, May, August, October and December.
5. The Phillips family go on holiday on Friday 3rd of July. Including that Friday, they go away for fifteen days. What date is the last day of their holiday? Friday 17th July
6. Jaskirat's birthday is on July 18th. She has her party the Friday before this. What day does Jaskirat's birthday party fall on? Friday 17th July

Greater Depth

7. Write the full date for the first day of the next month. Saturday 1st August
8. How many days are there in June, July and August altogether?
 $30 + 31 + 31 = 92$
9. Sunil was born in March 2009. How old is he in years and months?
11 years and 3 months or 11 years and 4 months.