Time Knowledge Organiser

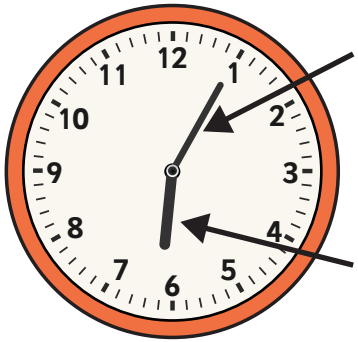
Maths | Y3

Key Vocabulary:

time, Roman numerals, hours, minutes, seconds, hour hand, minute hand, o'clock, half past, quarter past/to, past the hour, to the hour, analogue clock, digital clock, am/pm, noon, morning, afternoon, month, year, days, leap year, non-leap year, calendar, week, school year, start time, end time, duration, clockwise, anticlockwise, longest/shortest, length of time, units of time, measure,

Analogue and digital clocks

Analogue clocks are usually a round clock with numbers and hands that move around the clock in a clockwise direction. They have an hour hand and minute hand.



The minute hand is the long hand. It shows how many minutes have passed since the last hour or how many minutes until the next hour.

The hour hand is the short hand. It points to the hour. If it's between two numbers, it means the time is part way through that hour.

The hours are shown on the left

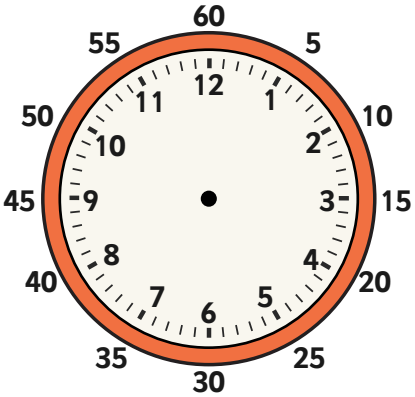
'am' shows time before noon. 'pm' shows time after noon.

The hours and minutes are separated with a colon.

The minutes are shown on the right. A zero is used to show single digits.

Tell the time to 5 minutes, and to the minute

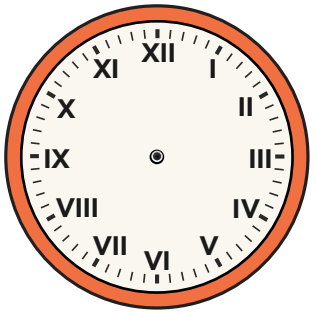
There are 60 minutes in 1 hour. On a clock, this can be divided into 12 equal intervals. Each interval is equal to 5 minutes.



Inside the intervals, there are smaller lines. Each line is equal to 1 minute.

Roman numerals to 12

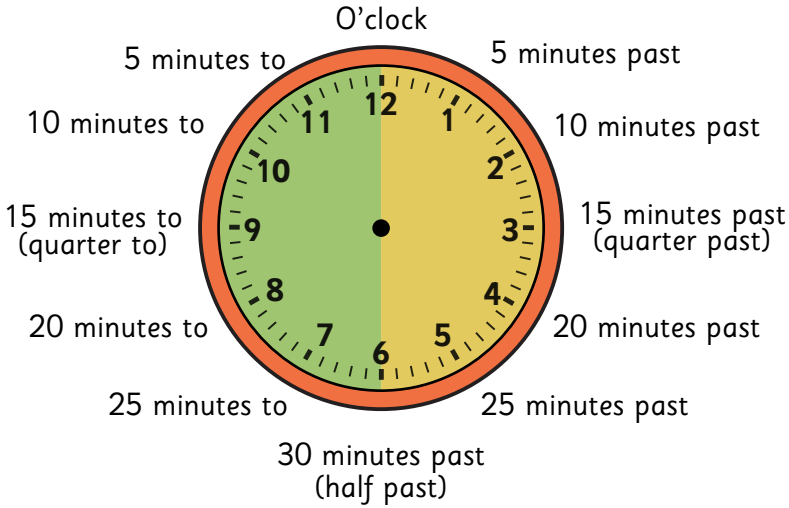
Roman numerals are a way of writing numbers using letters. These numerals are used on some clocks today.



I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	2	3	4	5	6	7	8	9	10	11	12

Past the hour and to the hour

When we look at a clock, we can split it into two halves:
On the right side of the clock, we tell the time past the hour.
On the left side of the clock, we tell the time to the hour.



'am' and 'pm'

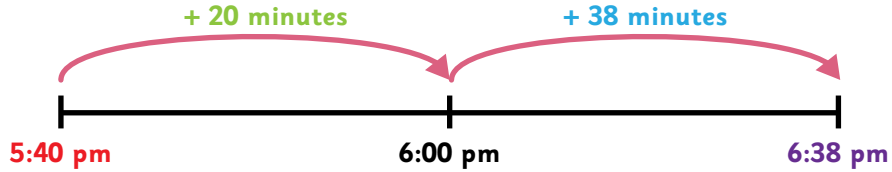
'am' describes times that happen before noon.
'pm' describes times that happen after noon.

9:00 am is in the morning, 9:00 pm is in the evening. The numbers in time appear twice in one day – once in the morning and once in the evening.

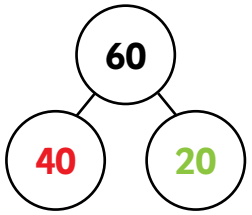
Start times, end times and durations of time

We can use start times and end times to work out the duration of an activity. The duration is how long the activity lasts.

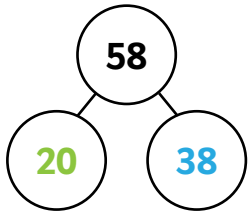
Activity	Start time	End Time	Duration
Cooking dinner	5:40 pm	6:38 pm	58 minutes



Minutes to the next hour



Minutes left



Number lines and number bonds to 60 are helpful when solving problems with time.

Useful conversions of time

60 seconds = 1 minute	30 minutes = half an hour
60 minutes = 1 hour	15 minutes = quarter of an hour
24 hours = 1 day	12 hours = half a day
7 days = 1 week	

Years, month and days

We can use calendars to track the year.
There are 365 days in 1 year.
There are 12 months in 1 year.
Each month has a different number of days.
Every 4 years, we get a leap year. A leap year has 366 days.
The extra day is added to February and becomes February 29th.

Month	Number of days	Month	Number of days	Month	Number of days
January	31	May	31	September	30
February	28 or 29 in a leap year	June	30	October	31
March	31	July	31	November	30
April	30	August	31	December	31

Weeks in a month

We say there are 4 weeks in a month because it is easy to remember, but most months have more than this.

Most months have 4 weeks and 2 or 3 days.

January						
S	M	T	W	T	F	S
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				

Comparing lengths of time

We can compare lengths of time by converting between units of time.

3 minutes and 29 seconds > **195 seconds**

We can convert the 3 minutes to seconds by multiplying the number of minutes by 60:

3 x 60 = 180 seconds

Then, add on the extra seconds: 180 seconds + 29 seconds = 209 seconds.

More useful conversions of time

12 months = 1 year	5 days = 1 school week
365 days = 1 non-leap year	366 days = 1 leap year

Solve problems with time

The shorter the length of time the quicker an activity has happened.

For example:

In a race, Tom completed a lap is 36 seconds.
Laila completed the same lap in 45 seconds.
Tom was quicker because he completed it in less time.