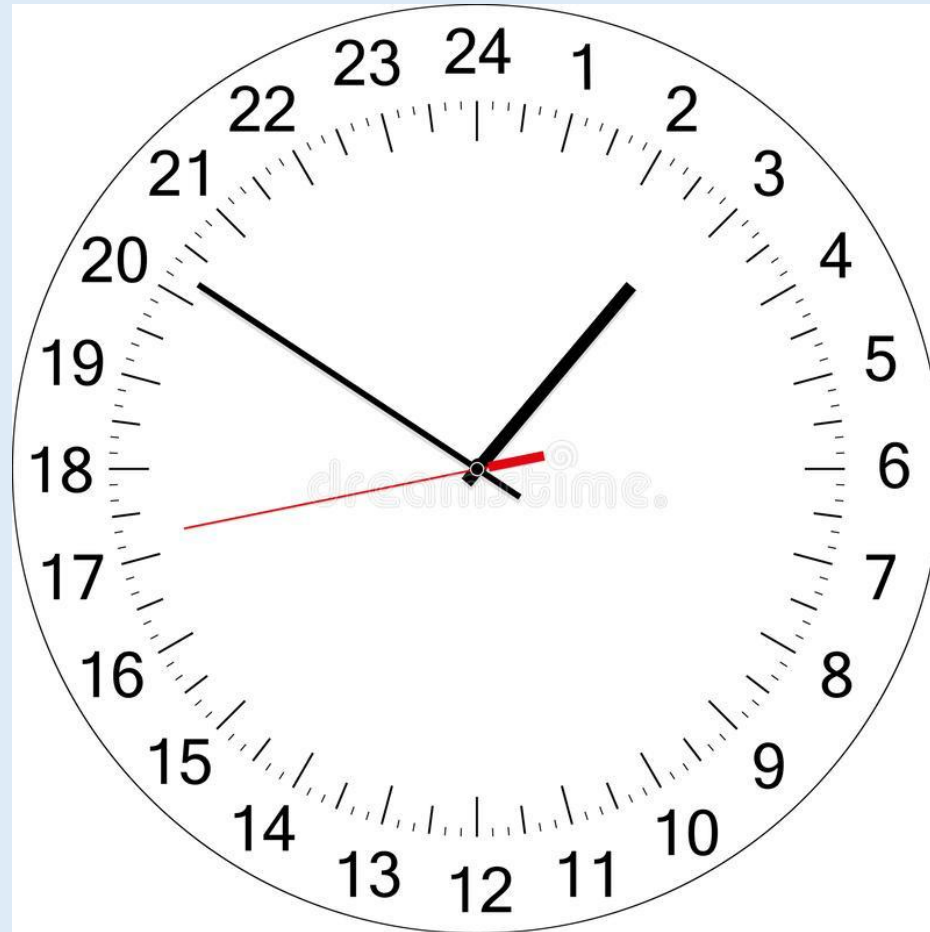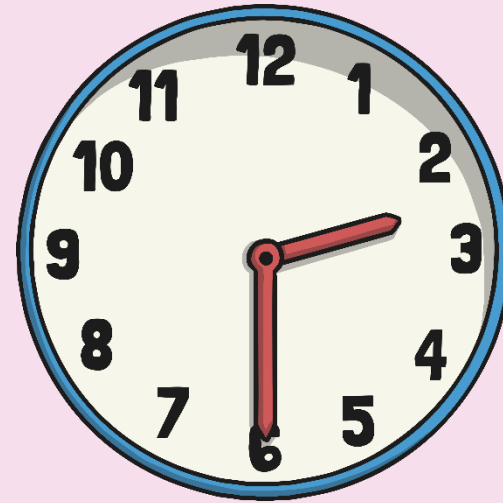# 24-Hour Time

The 24-Hour Day

A day has 24 hours.
A clock has 12 hours.
This means each time on the clock will happen twice every day.

half past 2 in the morning

half past 2 in the afternoon

a.m. and p.m.

- We use a way to write these times differently. One way is to use a.m. and p.m.

a.m. (ante meridiem – before noon)

2:30 a.m.

p.m. (post meridiem – after noon)

2:30 p.m.

The 24-Hour Day

Another way is to use a 24-hour clock.
This means the hours after 12 noon are converted to 13:00 to 23:00.

2:30

14:30

A 4-digit format is used. 2 digits for the hour, a colon (:) and 2 for the minutes.

24-Hours

- This clock and table show the corresponding hours on a 24-hour clock.
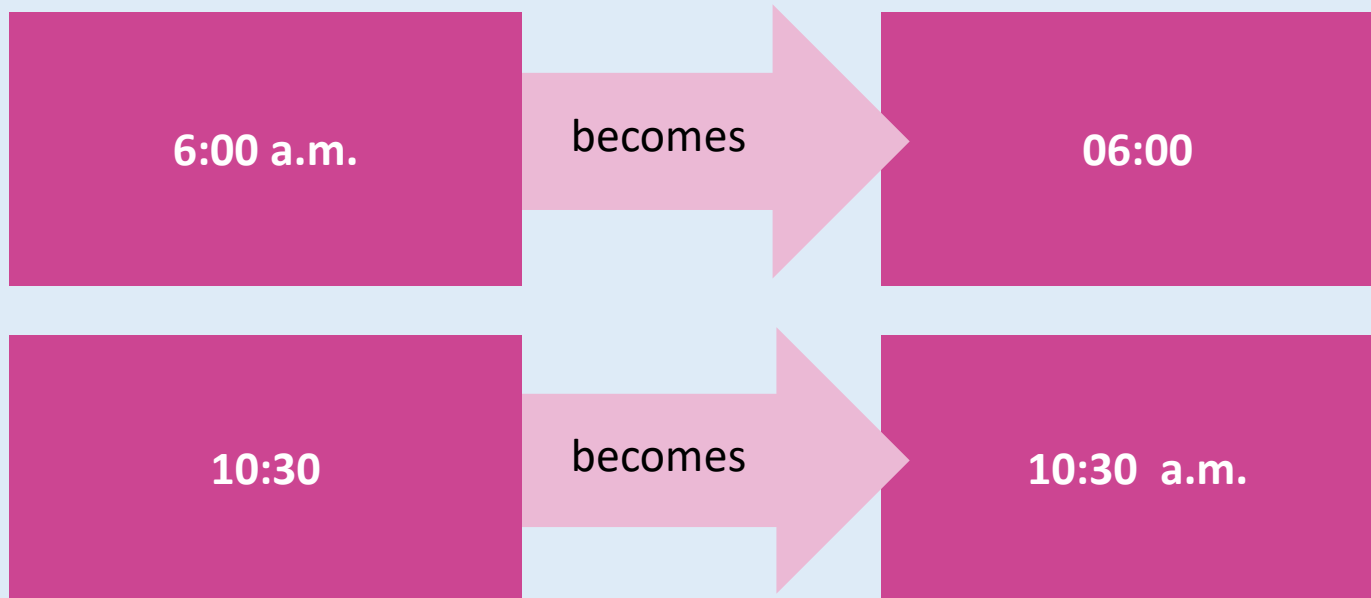

Midnight is referred to as 00:00

0:00 = 12:00 AM	12:00 = 12:00 PM
01:00 = 1:00 AM	13:00 = 1:00 PM
02:00 = 2:00 AM	14:00 = 2:00 PM
03:00 = 3:00 AM	15:00 = 3:00 PM
04:00 = 4:00 AM	16:00 = 4:00 PM
05:00 = 5:00 AM	17:00 = 5:00 PM
06:00 = 6:00 AM	18:00 = 6:00 PM
07:00 = 7:00 AM	19:00 = 7:00 PM
08:00 = 8:00 AM	20:00 = 8:00 PM
09:00 = 9:00 AM	21:00 = 9:00 PM
10:00 = 10:00 AM	22:00 = 10:00 PM
11:00 = 11:00 AM	23:00 = 11:00 PM

24-Hour Time in the Morning

To convert between 12- and 24-hour time in the morning change the format.

6:00 a.m.	becomes	06:00
10:30	becomes	10:30 a.m.

The hours stay the same.

24-Hour Time in the Afternoon

To convert between 12- and 24- hour time in the afternoon add or subtract 12 hours and change the format.

6:00 p.m. becomes 18:00

22:30 becomes 10:30 p.m.

Convert 12- to 24-hour

Convert these times to 24-hour time

12-hour tir	24-hour time
2:45 a.m.	
10:20 a.m.	
1:55 p.m.	
3:05 p.m.	
5:35 p.m.	
8:40 p.m.	
11:25 p.m.	

Convert 12- to 24-hour

Convert these times to 24-hour time

12-hour tir	24-hour time
2:45 a.m	02:45
10:20 a.m	10:20
1:55 p.m	13:55
3:05 p.m	15:05
5:35 p.m	17:35
8:40 p.m	20:40
11:25 p.m	23:25

Convert 24- to 12-hour

Convert these times to 12-hour time

24 hour time	12 hour time
03:15	
11:15	
14:45	
16:20	
18:55	
21:05	
22:35	

Convert 24- to 12-hour

Convert these times to 12-hour time

24 hour time	12 hour time
03:15	3:15 a.m.
11:15	11:15 a.m.
14:45	2:45 p.m.
16:20	4:20 p.m.
18:55	6:55 p.m.
21:05	9:05 p.m.
22:35	10:35 p.m.

Timetables

Transport timetables often use 24-hour times. Here is an example of a bus timetable:

Service Number	83	83a	83	83a
Ecclesfield, Mill Rd	17:10	17:21	17:35	17:41
Ecclesfield, High St	-	17:24	-	17:44
Southey Green, Moonshine Ln	17:22	17:33	17:47	17:53
Pitsmoor, Pinfold Ln	17:34	17:45	17:59	18:05
Sheffield, Snig Hill	17:42	17:55	18:07	18:15
Hunters Bar, Ecclesall Rd	18:04	18:13	18:27	18:33
Fulwood, Crimicar Ln	-	18:27	-	18:47
Bents Green, Ringinglow Rd	18:15	-	18:38	-

Timetables

Sometimes, 24-hour clock times appear without the separating colon (:). Here's what the bus timetable would look like without the colon:

Service Number	83	83a	83	83a
Ecclesfield, Mill Rd	1710	1721	1735	1741
Ecclesfield, High St	-	1724	-	1744
Southey Green, Moonshine Ln	1722	1733	1747	1753
Pitsmoor, Pinfold Ln	1734	1745	1759	1805
Sheffield, Snig Hill	1742	1755	1807	1815
Hunters Bar, Ecclesall Rd	1804	1813	1827	1833
Fulwood, Crimicar Ln	-	1827	-	1847
Bents Green, Ringinglow Rd	1815	-	1838	-

12- and 24-hour clock times

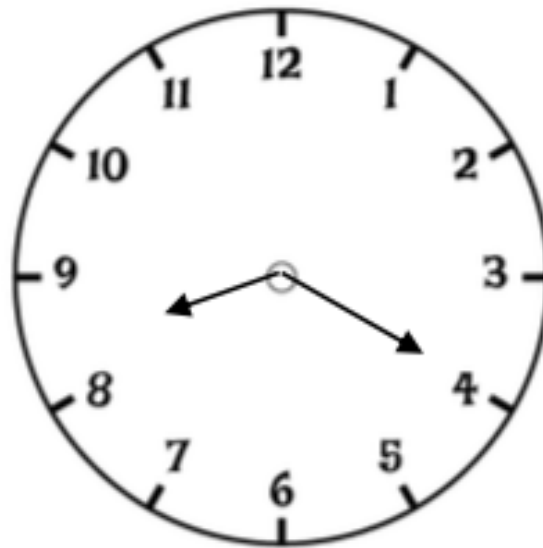|	midnight	a.m.	noon	p.m.
12-hour	12:00 a.m.	e.g. 5:15 a.m.	12:00 p.m.	e.g. 4:15 p.m.
24-hour	00:00	e.g. 05:15	12:00	e.g. 16:15

Challenge

Eva says the clocks are showing the same time of day.

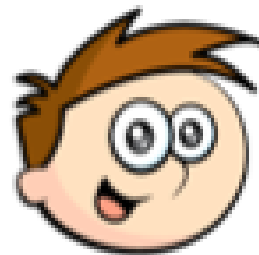Is she correct?
Explain how you know.

8:20

Answer One

Eva could be correct. The clocks are both showing twenty past 8. However, children should recognise that the analogue clock does not show whether the time is a.m. or p.m., so this could be showing 8.20 a.m. or 8.20 p.m.

Answer Two

- Teddy is not correct. Children should give examples to show this is incorrect.

- For example: 18:00, 8:30, 10:38 etc.

Now choose a challenge level and answer the questions.

You can also find the answers on another document.