



Hey maths team!  
This week our concept is **time** - we're focusing on **24 hour clock** and understanding different **time zones around the world!**  
Have a go of some of the warm ups, read about the concept, and then try some of the different questions and problems! We've added some resources which may help!  
Remember... be systematic!  
Miss Ellison & Miss Gibson

## 24 Hour Time

## Week 1 - Super Sport!

## Time Zones

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

a.m. = before noon  
p.m. = after noon

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

Midnight is referred to as 00:00 and 24:00.



After noon - p.m.

(+ or - 12 hours)

6:00 p.m. becomes 18:00

22:30 becomes 10:30 p.m.

Before noon - a.m.

6:00 a.m.

becomes

06:00

10:30

becomes

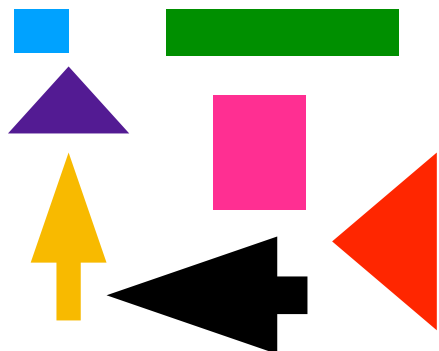
10:30 a.m.

### Warm Ups!

Beat SIRI! - 7, 8 and 9 times table.

The answer is... 387. What is the question?

Which is the odd one out? Why?



Number of the day: 6,752

- Write it in words.
- Even or odd?
- Place value grid it.
- Draw it.
- Partition it.
- 10 more?
- 10 less?
- 100 more?
- 100 less?
- Write 2 equations to get this as the answer.

Times Table Bingo - 4 and 11 times table.  
Put multiples in the bingo grid, say a question in the times table, mark off if they have it.

00:00 = 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
12:00 = 12:00 AM	24:00 = 12:00 PM

Time zones give specific areas on the earth a time of day that is earlier or later than the next door time zones.

There are 24 time zones. GMT, or UTC, is the time standard of the world.  
This means - all other time zones are determined ahead or behind based on GMT.

For more information on why we have time zones, watch :Time Zones & How They Work, NASA Kids Science News



City	Time	City	Time
Amsterdam	+ 01.00	Helsinki	+ 02.00
Athens	+ 02.00	Hong Kong	+ 08.00
Bangkok	+ 07.00	Islamabad	+ 05.00
Bonn	+ 01.00	Istanbul	+ 02.00
Buenos Aires	- 03.00	Kuwait	+ 03.00
Beirut	+ 02.00	Los Angeles	- 08.00
Chicago	- 06.00	Lisbon	+ 01.00
Canberra	+ 10.00	Milan	+ 01.00
Cairo	+ 02.00	Montreal	- 05.00
Edinburgh	GMT	Moscow	+ 03.00
Frankfurt	+ 01.00	New York	- 05.00
Gothenburg	+ 01.00	Oslo	+ 01.00

C  
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City	Time
Paris	+ 01.00
Peking	+ 08.00
Rome	+ 01.00
Rio de Janeiro	- 03.00
Riyadh	+ 03.00
Sydney	+ 10.00
Singapore	+ 08.00
Seoul	+ 09.00
Toronto	- 05.00
Vienna	+ 01.00
Washington	- 05.00
Wellington	+ 12.00

London 2:15pm = Moscow 5:15pm

Singapore 23:52 = Chicago 09:52  
↓  
London 15:52 (3:52p.m.)

## 24 Hour Time

Match the 12 hour time statement to the correct 24 hour time.

What time is equivalent to quarter to eight at night?	<b>19:38</b>	Twenty-three minutes to six in the morning equals?	17 minutes past 11 a.m. equals?	<b>02:08</b>	What is 5:35pm in 24 hour clock?
<b>22:00</b>	Which time is the same as 10:10pm?	<b>14:13</b>	<b>17:03</b>	10:00p.m. is equivalent to which 24 hour time?	<b>22:55</b>
<b>13:23</b>	8 minutes past 2 in the morning is the same as?	<b>18:27</b>	What is equal to half past nine in the morning?	<b>19:45</b>	55 minutes past 8 p.m. is also?
What is 5:03p.m. in the 24 hour clock?	<b>02:02</b>	Twenty-five to ten at night is also the same as?	<b>16:40</b>	What is 1:23p.m. in the 24 hour clock?	What is quarter to four in the morning?
<b>03:45</b>	<b>21:35</b>	38 minutes past 7 in the evening is also?	7 o'clock in the evening is the same as?	13 minutes past 2p.m. is written like?	<b>19:00</b>
Twenty to five in the afternoon can also be written as?	<b>05:37</b>	<b>22:10</b>	<b>17:35</b>	<b>20:55</b>	Two minutes to midnight is also?
<b>23:58</b>	6:27p.m. is equal to which time?	2:02a.m. is equivalent to which 24 hour time?	5 to 11 at night can also be written as?	<b>11:17</b>	<b>09:30</b>



Answer the questions below using the table. Your answer must be in 12 hour time.

Flight Number	Destination	Depart	Arrive
<b>TR864</b>	Manila	13:45	16:05
<b>CX982</b>	Shanghai	18:00	20:20
<b>SG356</b>	Singapore	17:30	22:45
<b>AK2515</b>	Bangkok	19:55	21:40
<b>GD321</b>	Jakarta	21:30	02:40

- How long is the flight to Manila?
- What time does the flight to Shanghai arrive?
- How long is the flight to Shanghai?
- Check in is 2 hours before departure. What time do you need to check in for the flight to Singapore?
- How much time does it take to fly to Singapore?
- How long does it take to fly to Jakarta?
- The flight to Singapore is delayed by one hour and a half! What is the new departure time?
- The time in Bangkok is 1 hour behind Hong Kong. What time will it be in Hong Kong when the plane lands?
- The gate closes for the flight to Jakarta 30 minutes before departure time. What time does it close?
- Create your own question and ask someone at home.

### 24 hour time

03:15

11:15

14:45

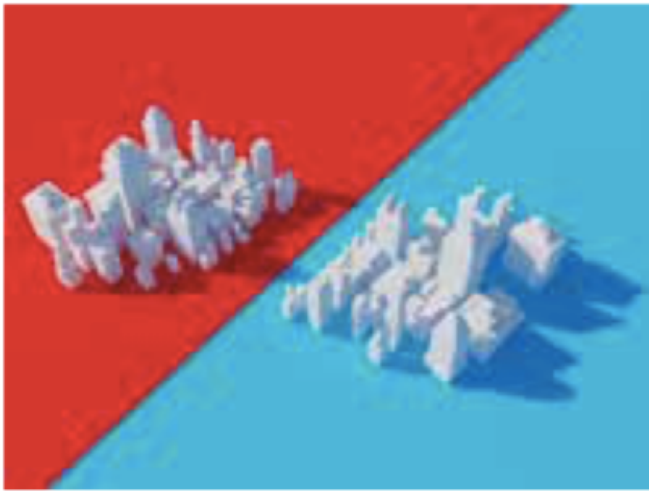
16:20

18:55

21:05

22:35

Convert these 24 hour times to 12 hour clock.



Two cities are five hours apart in time. What cities might they be? Find at least 5 answers.

## Time Zones



New Zealand are playing rugby against Ireland at 7:35pm in Dublin. What time will it be on in New Zealand?

1. To make these world clocks we used:

- plastic lids / paper plates / cut out circles
- paper for the clock arrows
- some pens to mark the hours
- small nails to secure the arrows and the clock to the board
- scissors to cut the arrows
- card to attach the clocks on

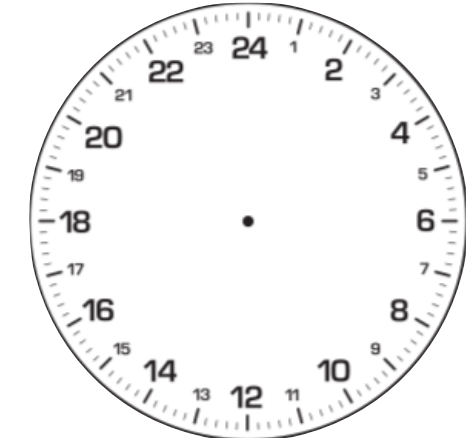
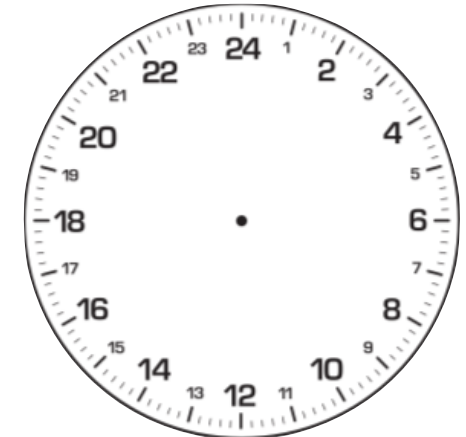
2. Make as many clocks as you are able to (brilliant if you can make 24 for each of the time zones!).

3. Call out a GMT time, and then set the clocks to their equivalent time based on the place you decide for each clock.

WORLD CLOCKS  
to understand  
time zones



Watch Race Around the World on BBC iPlayer - teams race through different countries without ever being on a plane!



School is finishing at 15:30 on the Isle of Man. Display the accurate time on these analogue clocks of three other countries.