

Time

Converting Time

Revision

Learning Intention

1. To revise previous work on converting between 12 and 24 hr clock and vice versa.

Success Criteria

1. Change from 12 to 24 hour clock.
2. Change from 24 to 12 hour clock.

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 12 hour clock to 24 hour clock just add 12 to the pm hours:

Example

s

8 pm
becomes

2000

9 pm
becomes

2100

6:30 pm
becomes

1830

11:30 pm
becomes

2330

4:20 pm
becomes

1620

3:10 pm
becomes

1510

12/24 Hour Clock

midnight	1 am	2 am	3 am	4 am	5 am	6 am	7 am	8 am	9 am	10 am	11 am
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
midday	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300

To go from 24 hour clock to 12 hour clock just **subtract** 12 from the hours if it is greater than 12:

Example

s

2000
becomes

8 pm

2100
becomes

9 pm

1730 becomes **5:30 pm**

2208 becomes **10:08 pm**

2006 becomes **8:06 pm**

1350 becomes **1:50 pm**

Converting Time

Let's make up our own questions!



Key Points

pm times add on 12

12 hour clock



24 hour clock

Analogue clock

ALWAYS use AM or PM

Hours 1 - 12

Digital clock

ALWAYS 4 digits

NEVER use AM or PM

Hours 0 - 24

greater than 12
subtract 12



Counting Method

When working out time difference we will use the **Counting Method**. This method will always work.

Example : Find the time difference between 08 40 hrs and 11 10 hrs



Hrs	Mins
	20
2	
+	10
2	30

Counting Method

But there are
60 minutes = 1 hour

70 mins = 1hr 10mins

A bus leaves Kirkintilloch Main Street at 14 40 hrs
and arrives in Aberdeen at 18 50 hrs.
How long was the journey.



Hrs	Mins
	20
3	
+	50
3	70

4hrs 10 mins



Using Timetables



Kirkie Bus Station*	0825	0925	1025		2025	2125	2225
Bishopbriggs	0837	0937	1037	And	2037	2137	2237
Milton	0843	0943	1043	Every	2043	2143	2243
Springburn	0848	0948	1048	Hour	2048	2148	2248
Port Dundas	0854	0954	1054	Until	2054	2154	2254
George Square	0902	1002	1102		2102	2202	2302
Glasgow Bus Station*	0914	1014	1114		2114	2214	2314

How long does the first bus take from Kirkie to Glasgow.



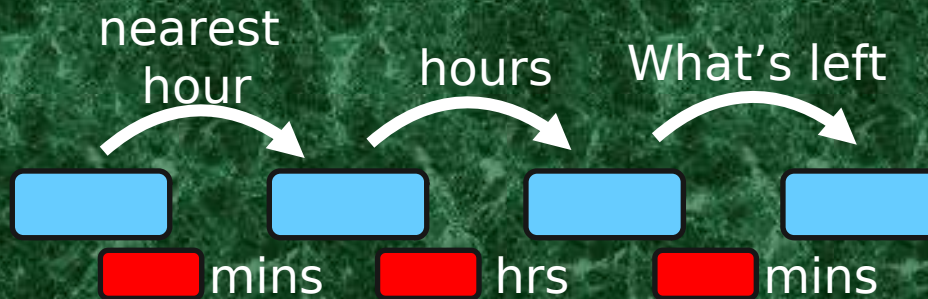
Hrs	Mins
0	35
	14
+	
49	

Counting Metric

But there are
60 minutes = 1 hour



Let's make up our own question !
The key steps are left on the slide to help you.



Hrs	Mins
+	

Counting Method

Time

Minutes and Secs

Learning Intention

1. To work out accuracy to 1 and 2 decimal places.

Success Criteria

1. Round to 1 and 2 decimal places.

Time

Minute & Seconds

Rounding time to 1 or 2 decimal places is just the same as rounding any number.

Example : Round the times to 1 and 2 decimals places

(a) 4.573 secs 4.6 secs to 1 decimal place

4.57 secs to 2 decimal place

(b) 52.455 secs 52.5 secs to 1 decimal place

52.46 secs to 2 decimal place

Time

Minute & Seconds

Note : In athletics the winner of a race corresponds to the smallest time.

Example : In a race the times are as follows

Mark 11.01 sec, Caitlin 10.05sec, Owen 10.03 sec, Amy 10.92 sec and Euan 10.73 sec.

Work out who won the race and the order they came in.

1st Owen 10.03 sec

2nd Caitlin 10.05sec

4th Amy 10.92 sec

3rd Euan 10.73 sec

5th Mark 11.01 sec

Time

Minute & Seconds

Example : In a race Katrina beat Daniel by 0.53 sec.
Daniel's time was 10.46 secs.

What was Katrina's time ?



Katrina won therefore her time will be 0.53 less.

$$\begin{array}{r} 10.46 \\ - 0.53 \\ \hline 9.93 \end{array}$$