72 ÷ 4

726 + 484

42 ÷ 5

602 – 352

45 x 8

What time does the clock show?

< > or =

$\frac{3}{4}$ of 32 ☐ $\frac{6}{8}$ of 32

Challenge:

Put the coins above in a row so that:

- the total of the first 3 coins is 57p
- the total of the last 3 coins is 31p
- the copper coins are at the start and end of the rows
- the 2 coins with the highest value are next to each other

Maths

So far we've looked at telling the time using analogue and digital clocks that split the day into two twelve hour sections, AM (morning) and PM (afternoon/evening). Both of these clocks go straight back to 1 after they reach the twelve. Today we're going to look at the 24hr clock. Why do you think it's called the 24 hour clock I wonder…

Right, because there are 24 hours in a day!
This clock begins from 00:00 at the very beginning of a new day, can you remember when that is? When does a new day start?

Our new day begins at midnight, so the 24hr clock will show 00:00 at midnight and will show the times very much like the 12 hour clock right up until midday/noon when it will show 12:00.

What's different this time though is that the 24hr clock doesn't just go back to 1 in the afternoon like the analogue and 12 hr clocks. This clock keeps going 13:00, 14:00, 15:00 … right up to 23:59 then goes right back to 00:00 for the new day.

We joked last week that we don't say 13 o'clock and 14 o'clock and that is still true. When the clock says 13:00 we would still say this as 1 o'clock. By showing 13 instead of 01, we know that this must be 1 o'clock after midday or afternoon. So 24hr clocks don't use AM or PM because if the number is higher than 12 (midday), it must be in the afternoon or evening.

So both clocks with say 12:00 at midday but only the twelve hour clock will say PM. How do I know it's not midnight on the 24 hr clock?

1 pm on a 12hr clock would show as 13:00 on a 24hr clock as 13 is one hour more than twelve.

2pm would be 14:00 because 14 is *two more* than twelve.

3pm would be 15:00 because 15 is *three more* than twelve… are you seeing the pattern?

Let's try with this clock.

18 is how many after twelve?

If it's after twelve or *after noon* what time of day is it, morning or evening?

18 is 6 hours after twelve and it's 15 minutes after the hour so it must be **quarter past 6 in the evening.**

Can you have a go at matching the 12 hour clock with the 24 hour clock:

1:00 pm	19:00
11:00 am	23:00
7:00 pm	09:00
9:00 am	11:00
11:00 pm	15:00
3:00 pm	13:00