

Year 4 Maths 22nd May 2020

LO: convert from analogue to digital time (24 hour clock)

- ▶ **SOME WILL EVEN** work systematically to solve a digital clock problem and explain their method.
- ▶ **SOME** will convert from digital format to analogue format.
- ▶ **MOST** will convert from analogue format to digital format.
- ▶ **ALL** will understand that analogue and digital clocks give the same information.

RECALL- Fill in the sentence gaps.

- ▶ The time is 10 past 11.
- ▶ This can also be written as _____ minutes past 11.
- ▶ The digital time is ____:____

RECALL ANSWERS

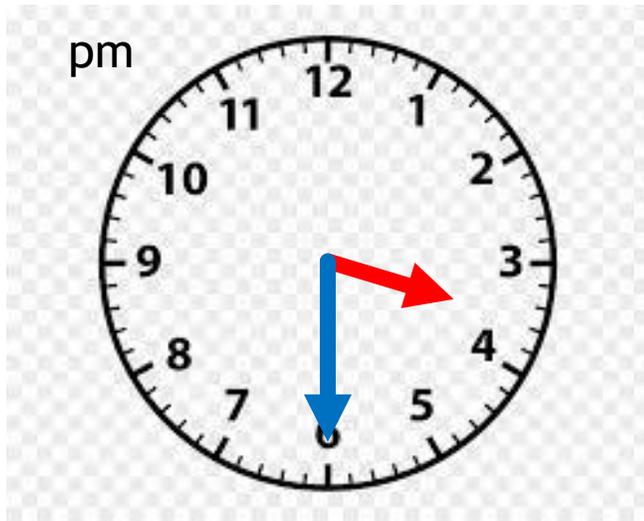
- ▶ The time is 10 past 11.
- ▶ This can also be written as **10** minutes past 11.
- ▶ The digital time is **11:10**.

Remember, the minutes comes second in digital time.

Remember, the hour comes first in digital time.

GUIDED PRACTICE

Yesterday we looked at converting analogue time to digital time. For instance, if it was half past 3 in the afternoon, you wrote the digital time as 03:30 pm. Today we are going to convert analogue time to digital time again, this time using a 24 hour digital clock.

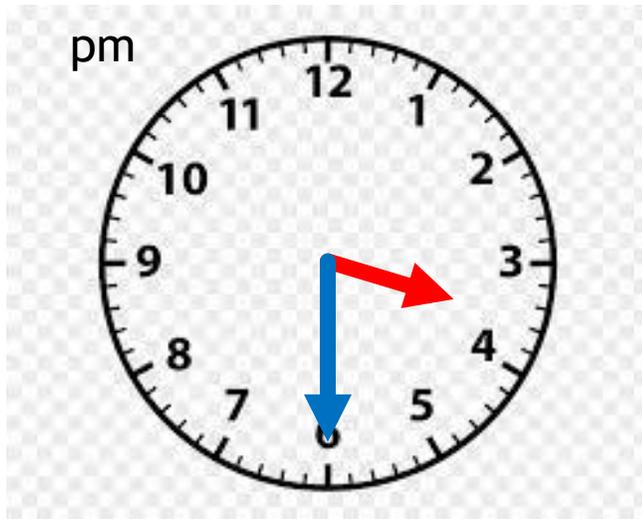


Instead of writing this as 03:30 pm, we are going to write 15:30.

What do you notice is the same and different about 03:30 pm and 15:30?

GUIDED PRACTICE

Yesterday we looked at converting analogue time to digital time. For instance, if it was half past 3 in the afternoon, you wrote the digital time as 03:30 pm. Today we are going to convert analogue time to digital time again, this time using a 24 hour digital clock.

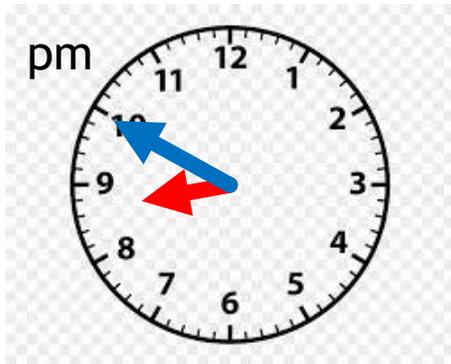


What do you notice is the same and different about 03:30 pm and 15:30?

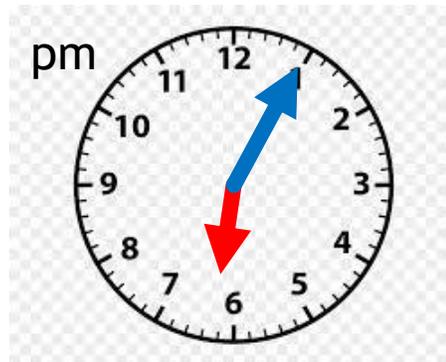
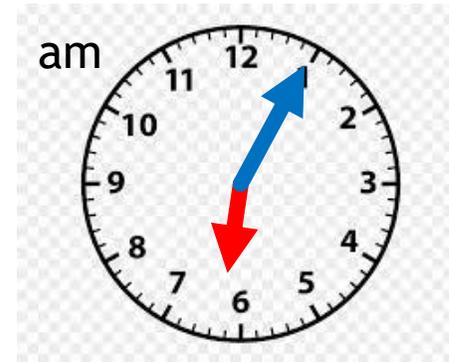
They are both the same time,
There is no 'pm' after 15:30.
The second digital time has 12 more hours than the first. ($15 - 3 = 12$)

GUIDED PRACTICE

Have a go at writing these analogue times as 24 hour digital time. I have explained what to do in the first one.

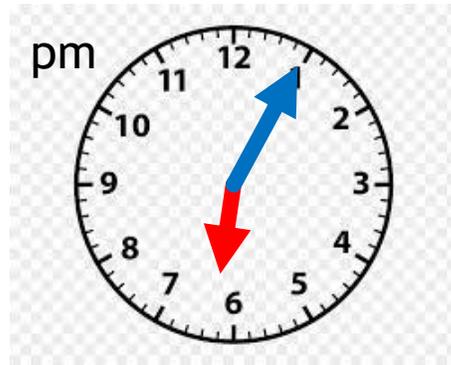


This time is in the afternoon, because it says pm next to the clock. The short hand is after 8 but before 9. This means the hour is 8. The long hand is pointing to 10, which means it is 50 minutes past 8. This means there are 50 minutes. I need to add 12 to 8 to make the time correct for a 24 hour digital clock. So, the time is 20:50 on a 24 hour digital clock.

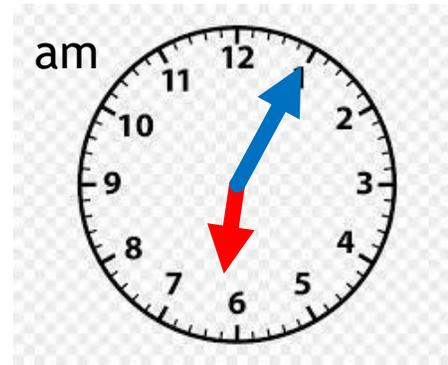


GUIDED PRACTICE

Have a go at writing these analogue times as 24 hour digital time. I have explained what to do in the first one.



18:05



06:05

These two times are both 5 past 6. However, the first one is in the afternoon (pm). The second one is the morning (am). So we add 12 hours to 6 to make the digital time correct for the pm time. ($6 + 12 = 18$). The minutes stay as '05'.

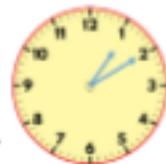
Intelligent practice - one chilli

 Match the analogue and digital times.

a.m.		p.m.		p.m.		a.m.	
	13:10		07:10		00:45		21:20

ONE CHILLI ANSWERS

 Match the analogue and digital times.

a.m.		p.m.		p.m.		a.m.	
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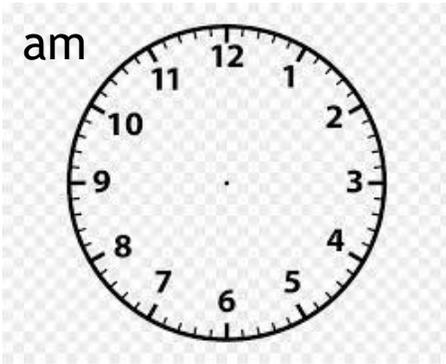
07:10

21:20

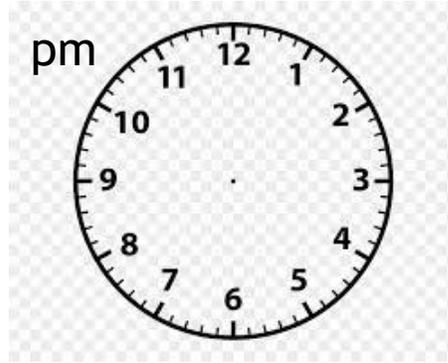
13:10

00:45

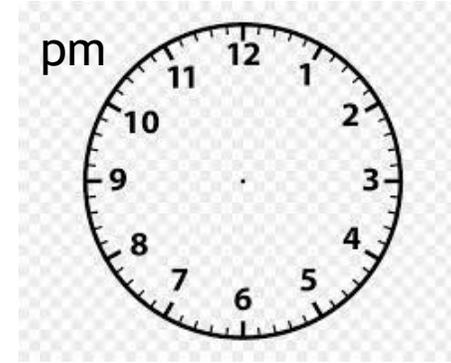
Two chillies- Convert the digital time to analogue.



05:20

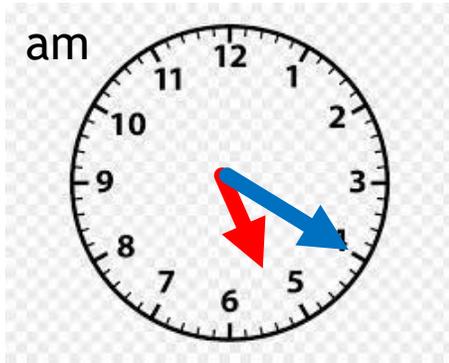


19:40

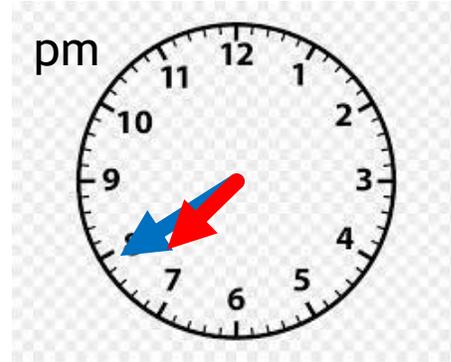


23:10

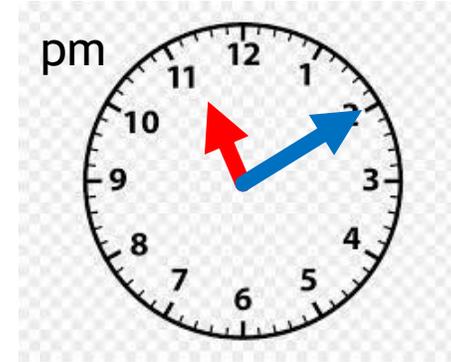
TWO CHILLI ANSWERS



05:20



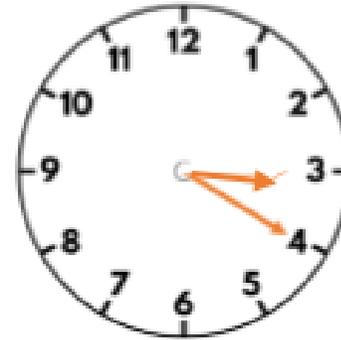
19:40



23:10

Three chillies

 Sally leaves school at the time shown.
She arrives home 1 hour later.
What will the time be on a 24 hour
digital clock?

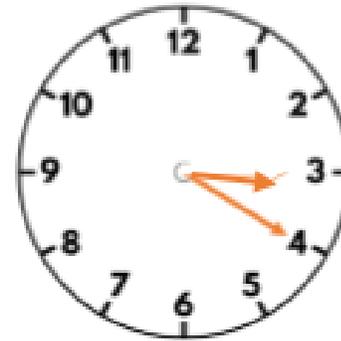


9

THREE CHILLIES ANSWERS



Sally leaves school at the time shown.
She arrives home 1 hour later.
What will the time be on a 24 hour
digital clock?



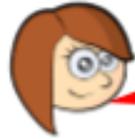
9

Sally leaves school at 20 past 3.
She arrives home 1 hour later at 20 past 4.
On a 24 hour digital clock this is 16:20.

Dive deeper

Three children are meeting in the park.

Rosie says,



We are meeting at
14:10.

Teddy says,



We are meeting at
02:10 p.m.

Eva says,



We are meeting at ten to
two.

Will all the children meet at the same
time?

Explain your answer.

DIVE DEEPER ANSWERS

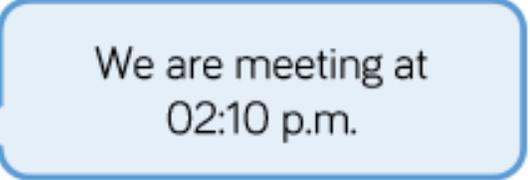
Three children are meeting in the park.

Rosie says,



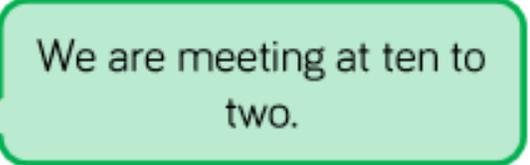
We are meeting at 14:10.

Teddy says,



We are meeting at 02:10 p.m.

Eva says,



We are meeting at ten to two.

Will all the children meet at the same time?
Explain your answer.

Rosie and Teddy are both going to meet at ten past 2 in the afternoon.

Eva is going to meet at ten to 2, which is 20 minutes earlier than Rosie and Teddy.

They will not all meet at the same time.

Self assessment: what did you achieve?

- ▶ **SOME WILL EVEN** work systematically to solve a digital clock problem and explain their method.
- ▶ **SOME** will convert from digital format to analogue format.
- ▶ **MOST** will convert from analogue format to digital format.
- ▶ **ALL** will understand that analogue and digital clocks give the same information.