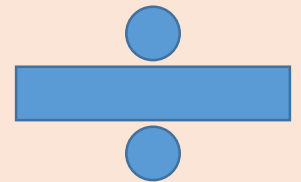
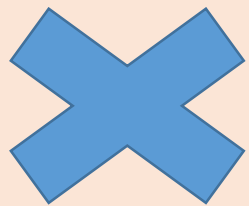
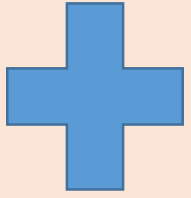


Year 2

Maths

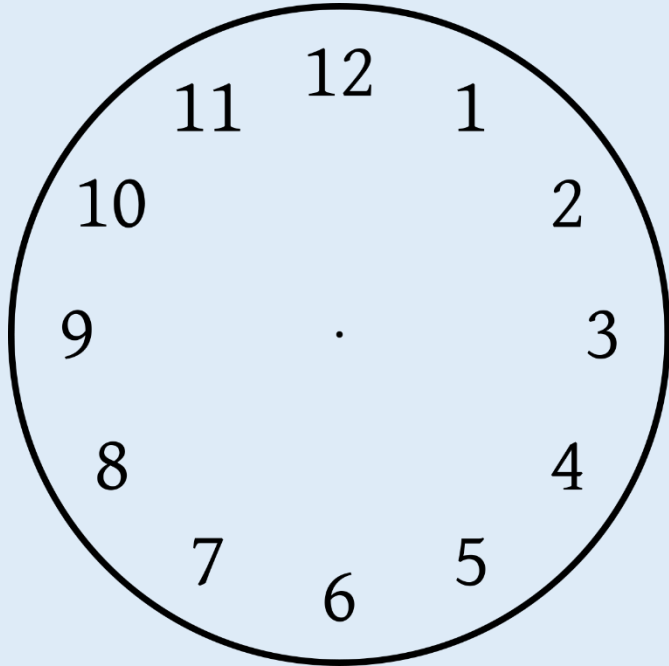
W.B 08.06.20

Time

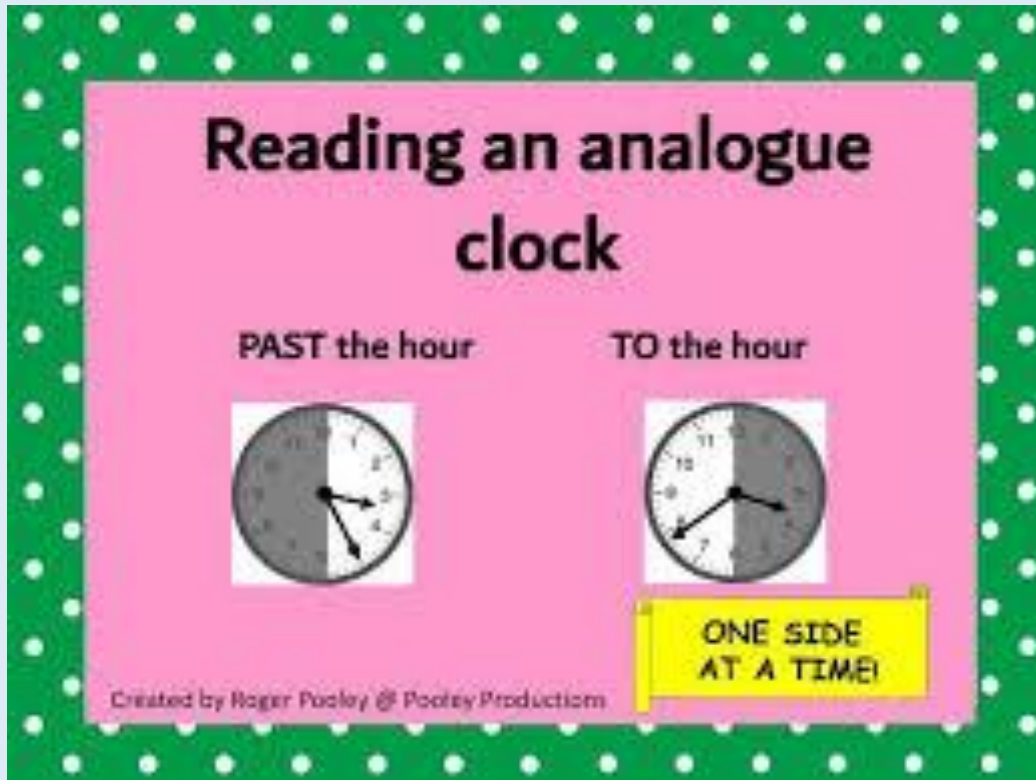


Day 1 – Nearest 5 minutes past the hour.

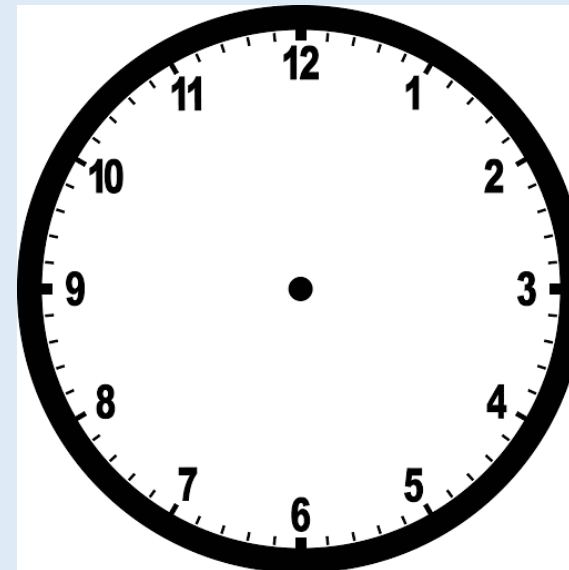
Reminder – a clock is a like a circular number line. The hour hand moves around the clock in 12 hours.



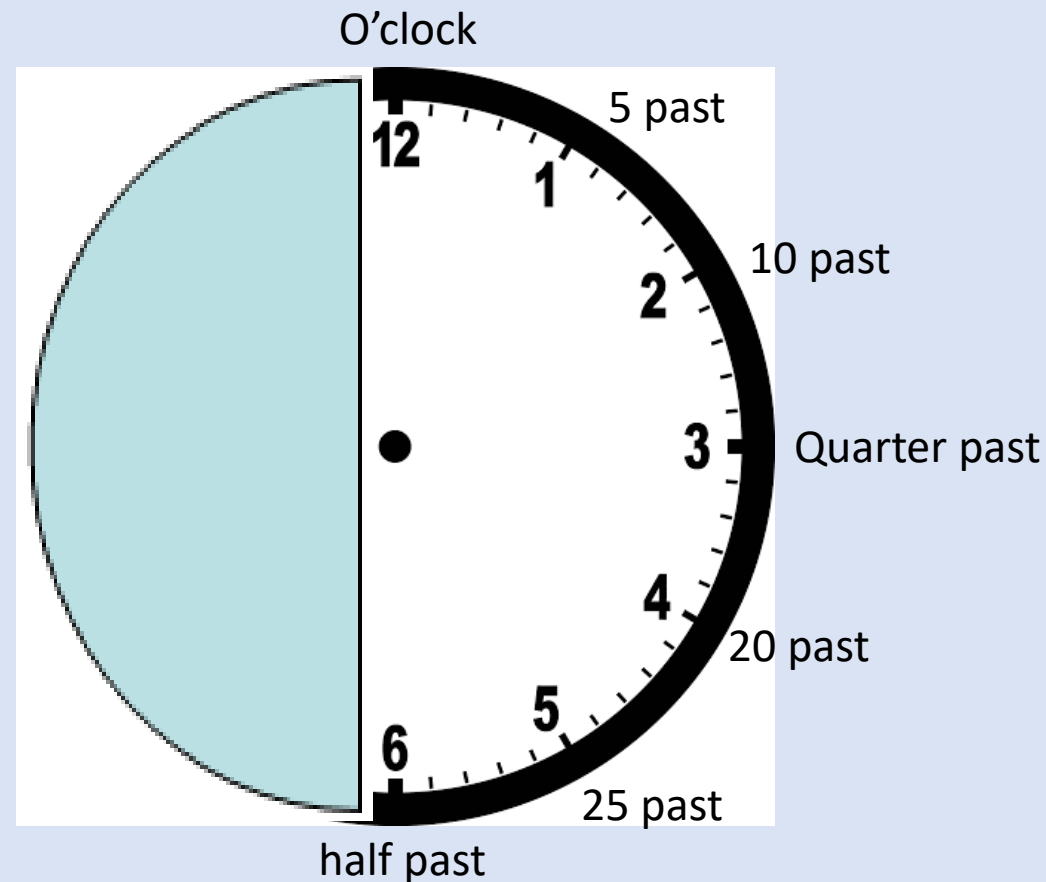
Day 1 – o'clock



Imagine your clock is split into two halves. One half is the 'past' side and the other is the 'to' side. Today we'll be looking at the past side.

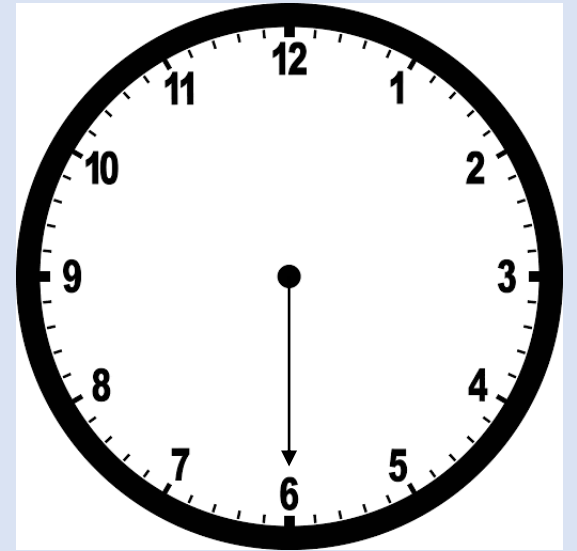
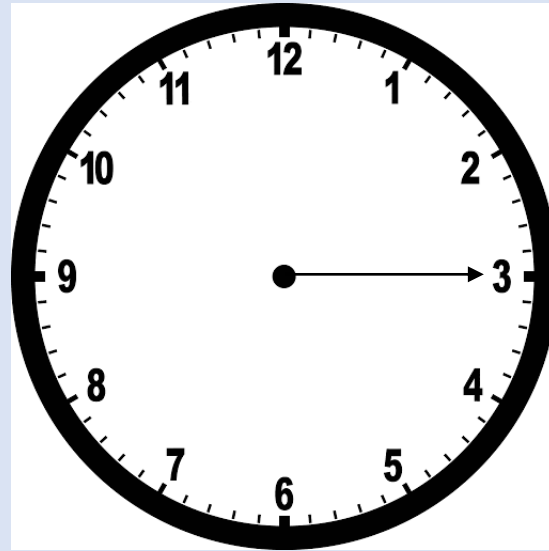
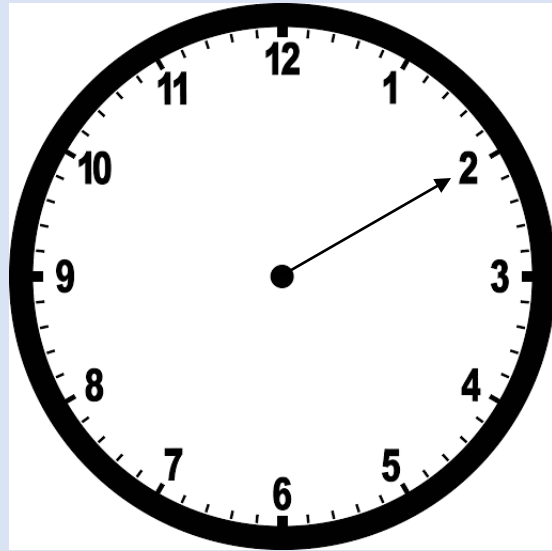
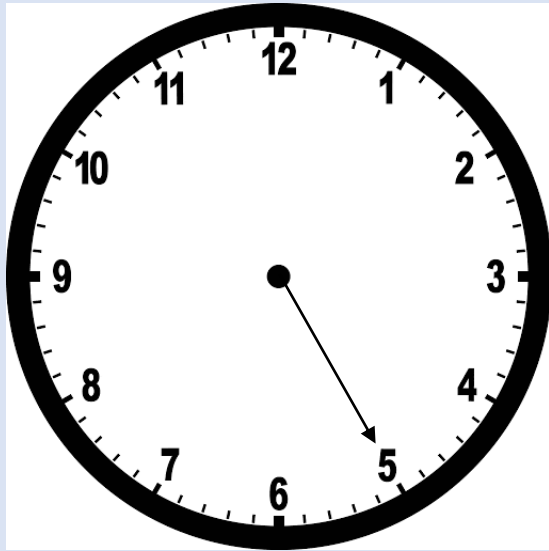


The minute hand takes 1 hour to move the whole way round the clock. Every five minutes, the minute hand reaches the next number on the clock. Let's practise counting in steps of five from o'clock to half past. The clock below is labelled to help you.



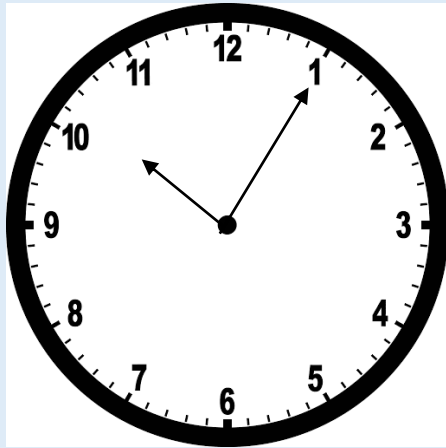
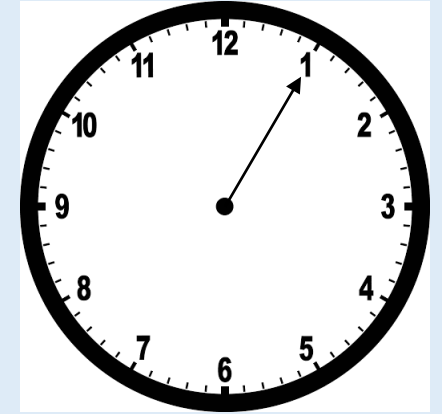
Remember the minute hand is the longer hand.

If the minute hand is pointing at the numbers below, would it be o'clock, 5 past, 10 past, quarter past, 20 past, 25 past or half past?



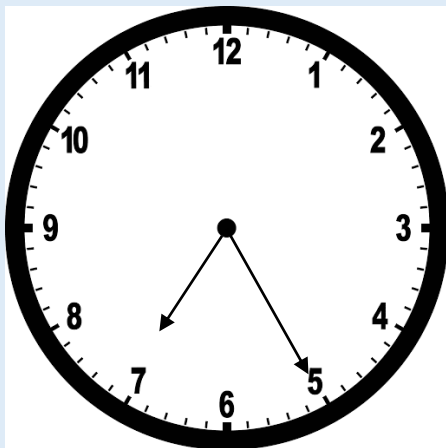
Using what you already know about counting in fives, how many minutes past would 'quarter past' be the same as? What about half past?

On this clock below, we can see that it is five past. But we need to look at the hour hand to see which hour it has recently passed to see the exact time.



Examples

I know that the time is 5 past 10 because the minute hand is pointing at five past, and the hour hand has just passed the 10.



I know that the time is 25 past 7 because the minute hand is pointing at 25 past and the hour hand has just passed the 7.

Today's tasks

Task 1

What time is shown on the clock's below?



Draw the times on the clocks below.



25 past 11



25 past 8



10 past 11

Task 2

When James looks at the clock, this is the time he sees.



What time will it be in 20 minutes?

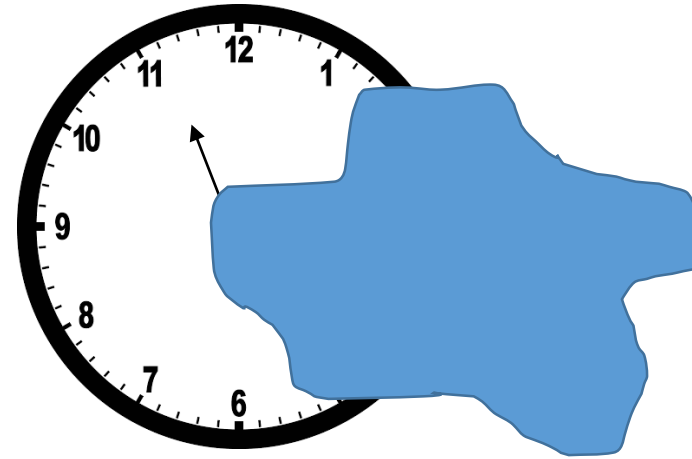
Challenges



Four lots of 5 minutes is the same as quarter of an hour.

Do you agree with Rosie? Explain why.

Samia has spilt the ink from her pen all over this clock! She can't tell what time it is.



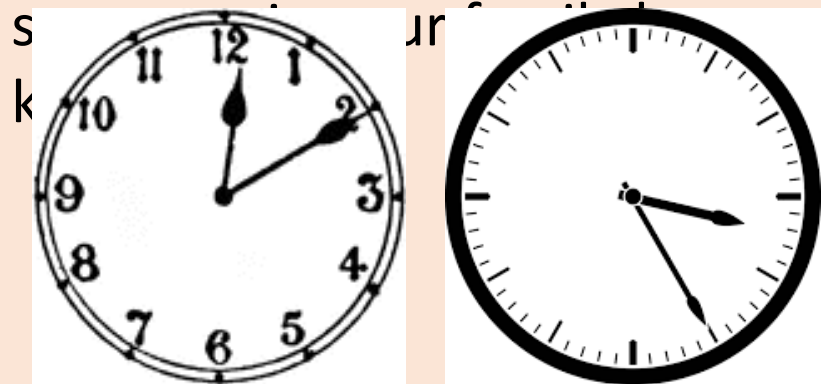
What do you definitely already know about the time on this clock? List all the things you know already.

What time could it be? Is there more than one answer?

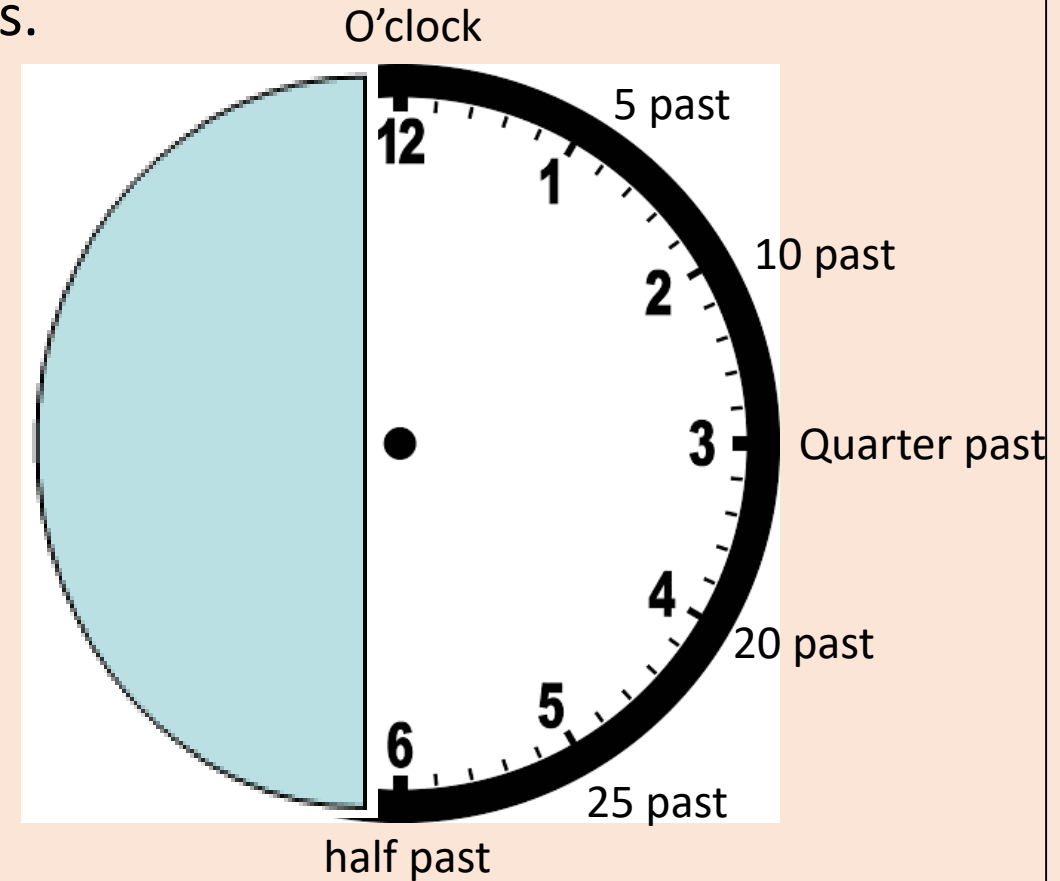
Day 2 – nearest five minutes to the hour.

Let's have a quick recap from yesterday.

What time's are shown below? Tell

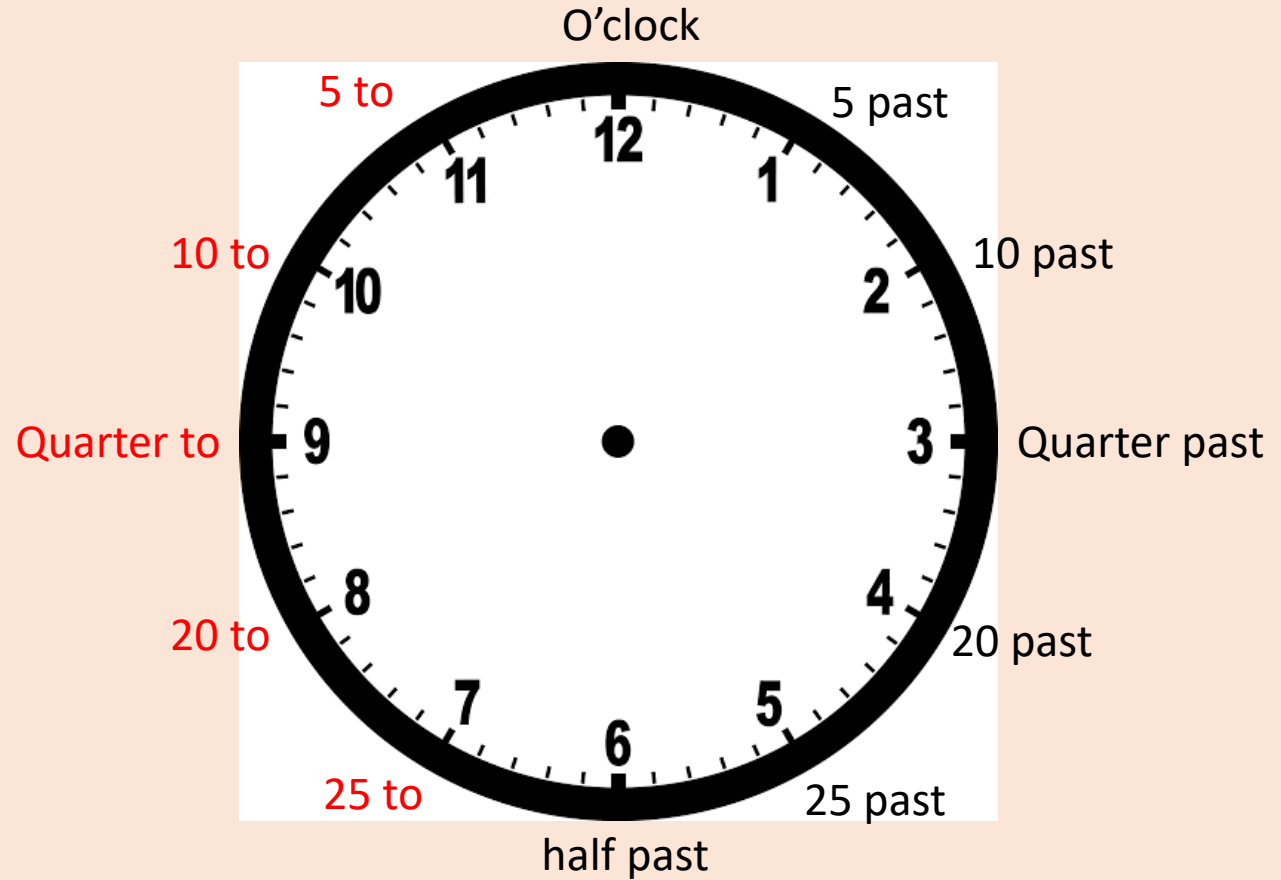
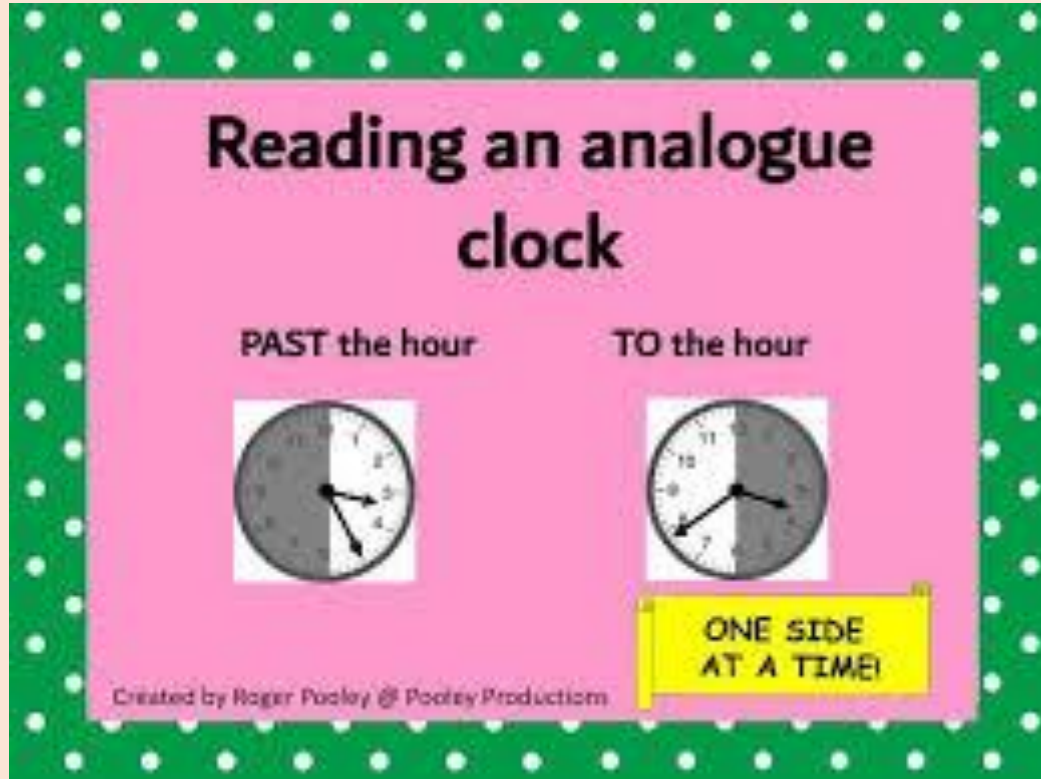


Now practise counting down the 'past' side of the clock from o'clock to half past in steps of 5 minutes.



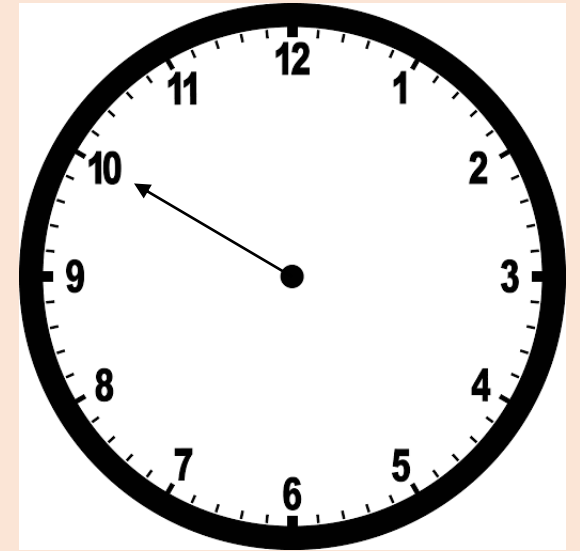
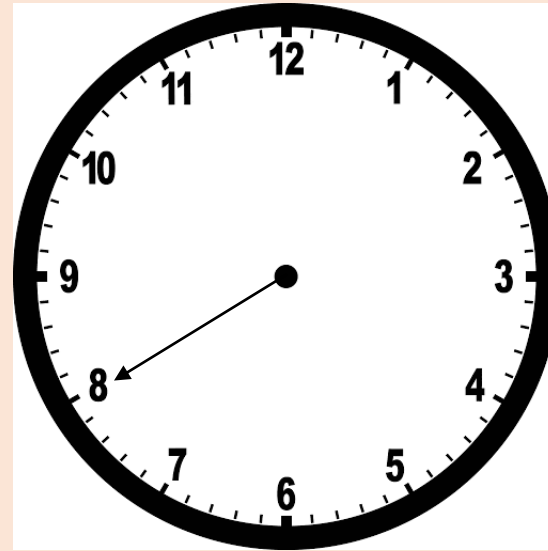
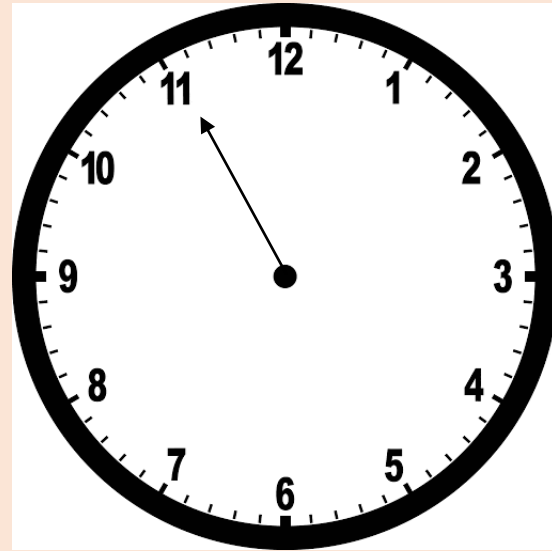
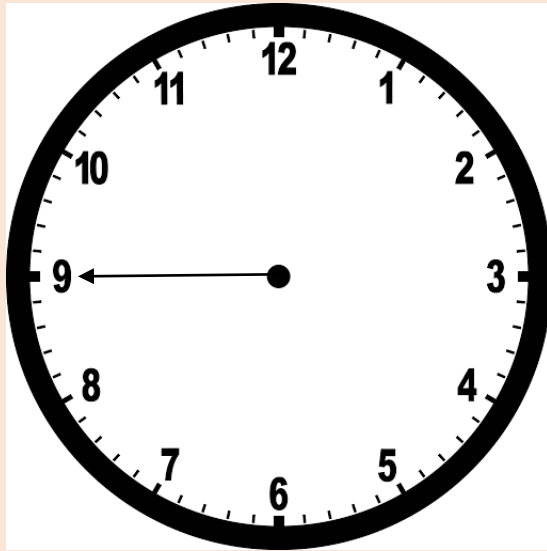
Today, we will look at the 'to' side of the clock. When we get past 'half past' we starting counting down to see how many minutes are left until the hour hand reaches the next hour and the minute hand reaches o'clock.

Start practising by counting down from 25 to, to o'clock. When you're really good at this, practise counting all the way around the clock in steps of 5 minutes from o'clock back to o'clock.



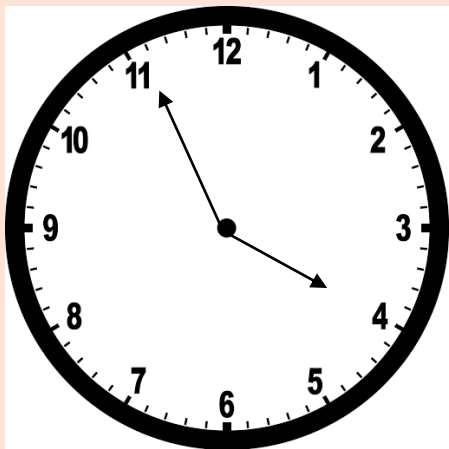
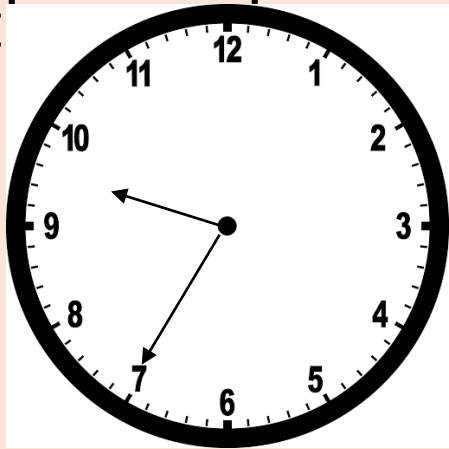
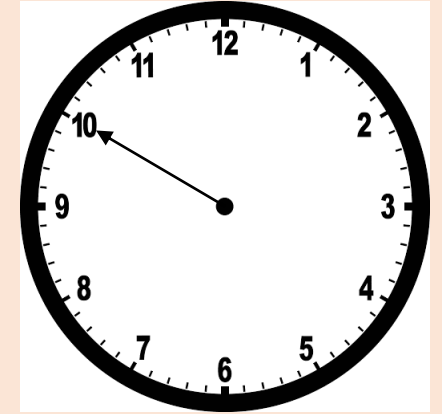
Remember the minute hand is the longer hand.

If the minute hand is pointing at the numbers below, would it be 25 to, 20 to, quarter to, 10 to or 5 to?



Using what you already know about counting in fives, how many minutes to would 'quarter to' be the same as? How do you know?

On this clock below, we can see that it is ten to. But we need to look at the hour hand to see which number the hour hand is moving **towards**. This is because for the 'to' side of the clock, we are saying how many minutes until the hour hand reaches that number, not how many past the last hour.



Examples

This is 25 to ten because it is 25 minutes before 10 o'clock'. I know this because 10 is the next number the hour hand will reach.

This is 5 to 4 because it is 5 minutes before 4 o'clock'. I know this because 4 is the next number the hour hand will reach.

Today's tasks

Task 1

What time is shown on the clock's below?



Draw the times on the clocks below.



10 to 9



quarter to 4



20 to 1


Task 2

When James looks at the clock, this is the time he sees.




What time will it be in 20 minutes?

Challenges




Dora

It is ten to one.



Amir

It is ten past ten.




Alex

It is ten to two.

Who is correct? Explain your answer.

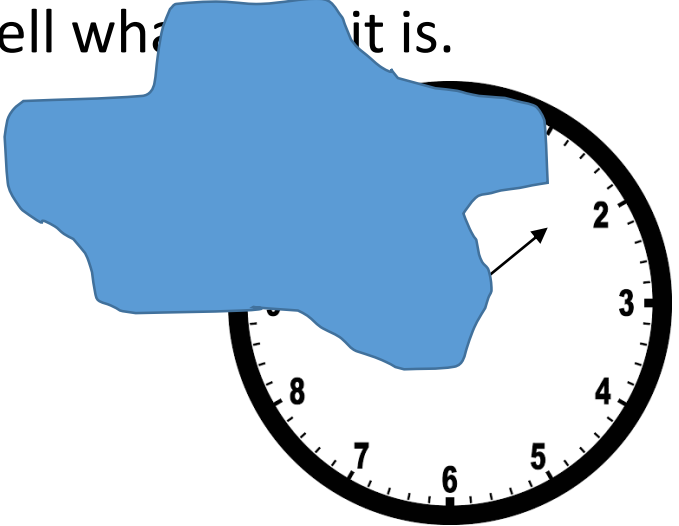
Sophia starts her Maths questions at 10 past 11



Each question takes her 5 minutes to complete.
She completes 7 questions.

What time does Sophia finish her Maths questions?
Explain how you found the answer.

Samia has spilt the ink from her pen all over this clock! She can't tell what time it is.



What do you definitely already know about the time on this clock?
List all the things you know already.
What time could it be? Is there more than one answer?
Why couldn't it be 2 o'clock?

Day 3 – Durations of time

Notes and guidance for adults. Use this to discuss the task to the right.

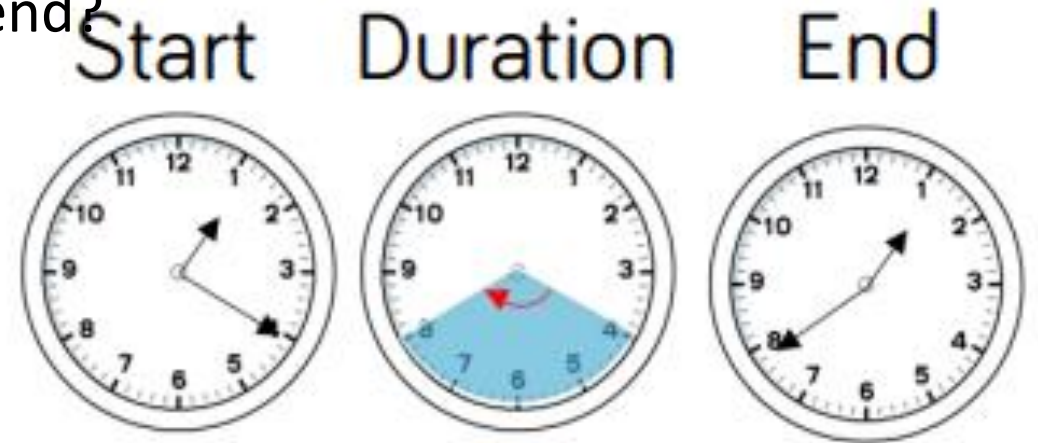
Children identify the start and end time of an event. They use these times to work out how long an event lasted. Children should understand this is the duration of an event. Children use individual clocks and number lines to help them work out the duration of an event. They can count in steps of 5 minutes to help them.

Mathematical Talk










What is the start time? What is the end time?
How can we show this on the clock?
How long did the event last?

How did you work out the duration?
Are there any other methods for working out duration?

How much time has passed from start to end?



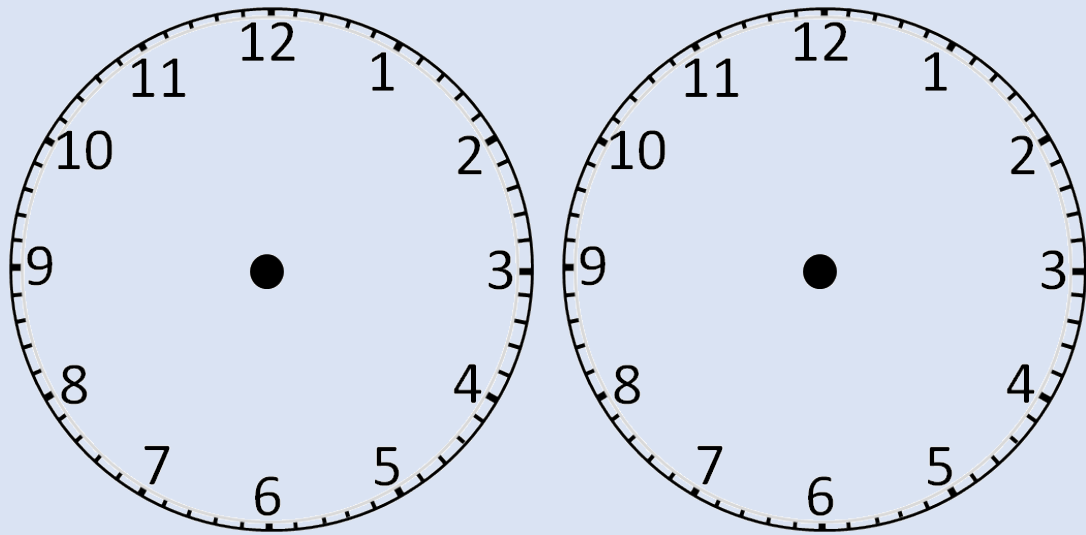
Complete the table below.

Start	End	Time passed	Duration
			_____ minutes
			_____ minutes
5 past 2 	5 to 3 		_____ minutes

Main task and challenge

Jack leaves school at quarter past 3. He arrives home at 5 to 4. How long was his journey?

Use the clocks below to prove it.



Oh no! The hour hand has fallen off the class clock!



Start



End

The clock shows the start and end time of a film.

How long do you think the film lasted?

Aimee is planning her birthday. She wants to plan something to do from 9am to 5pm.

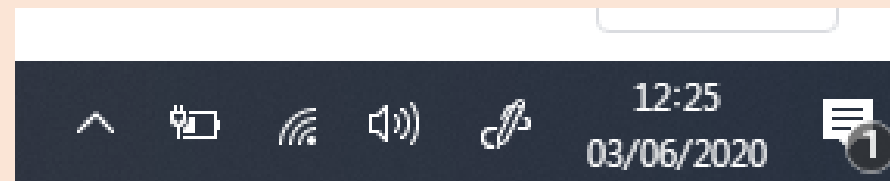
Here are the things she wants to do:

- Visit the zoo (3 hours)
- Go to Pizza Palace (1 hour and a half)
- Have breakfast (half an hour)
- Play party games (1 hour)
- Watch a film (2 hours)

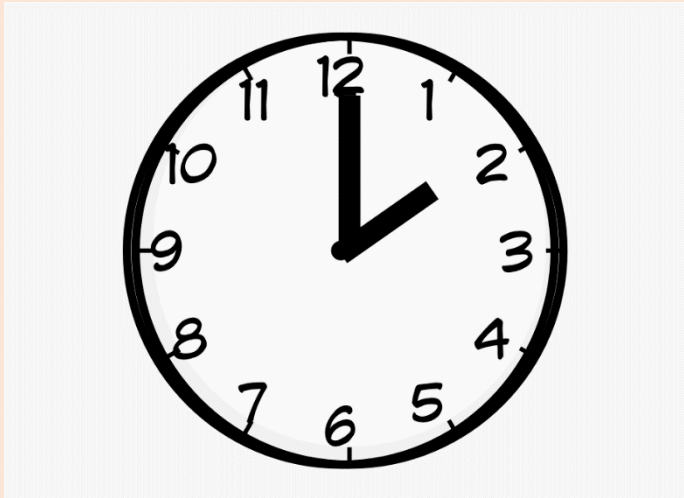
Create a timetable for Aimee's day.

Day 4 – Digital time – o'clock, quarter past and half past.

Over the past week, we have been learning about reading the time. However, time is not just shown on analogue clocks. We can read the time digitally as well. This can be on the T.V, alarm clocks, watches, computers, and other screens. Here are some examples.



o'clock















The time here is 2 o'clock because the hour hand is on the 2 and the minute hand is pointing to 'o'clock'.

On a digital clock we have the hour first (which is 2 here) and the minutes past the hour next. At o'clock we have 0 minutes past, we have to put two zeros.



Have a go at matching the analogue and digital times below.

Tick the correct analogue clock that matches the digital time and discuss with someone at home how you know.

1.		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
2.		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
3.		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	

Now write down the digital versions of the analogue clocks that didn't match.

Remember
Hour : Minutes

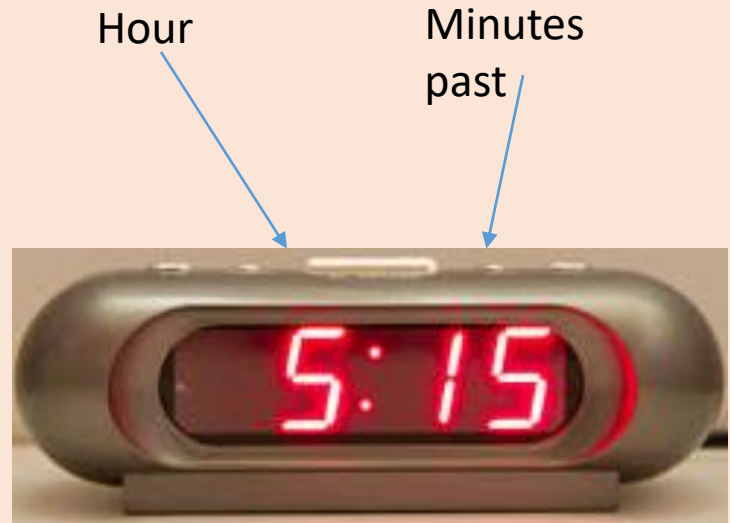
__ : __

Quarter past







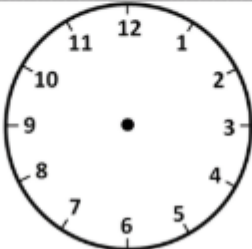
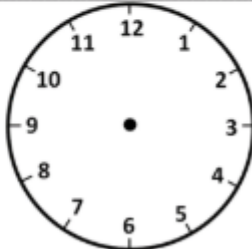
The time here is quarter past 5. I know this because the hour hand is past the 5 and the minute hand is pointing at quarter past.

On a digital clock we have the hour first (which is 5 here) and the minutes past the hour next. We already know that quarter past is the same as 15 minutes past.



Complete the missing digital and analogue times below. Can you write them in words as well? For example, the first would be written as 'quarter past 11'

past 11'

		
11:15		
		
	4:15	7:15

Half past

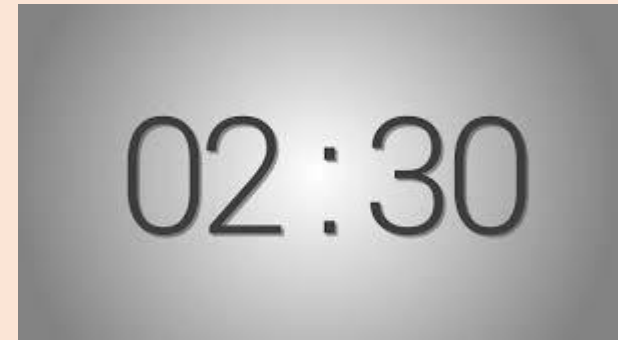


The time here is quarter half past 2. I know this because the hour hand is past the 2 and the minute hand is pointing at half past.

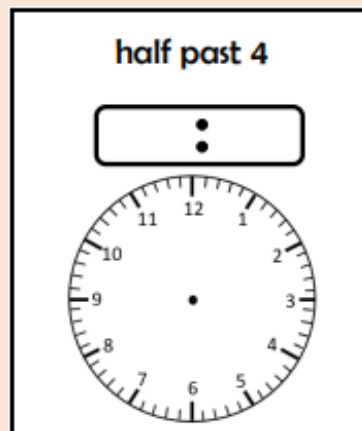
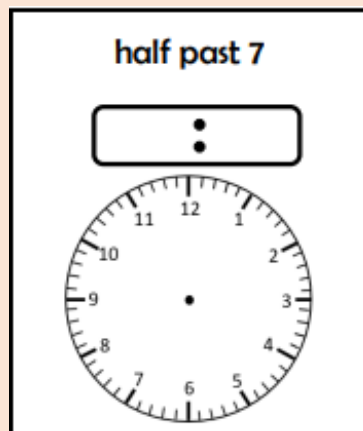
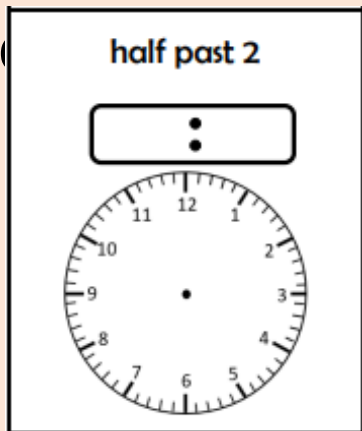
On a digital clock we have the hour first (which is 2 here) and the minutes past the hour next. We already know that quarter past is the same as 15 minutes past

Hour

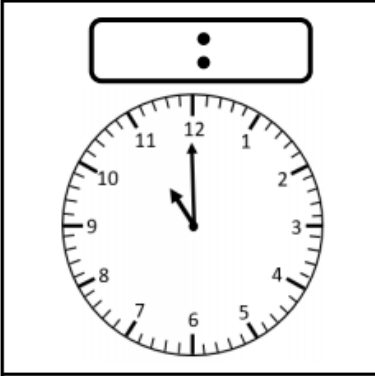
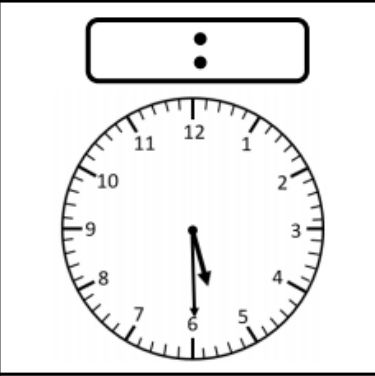
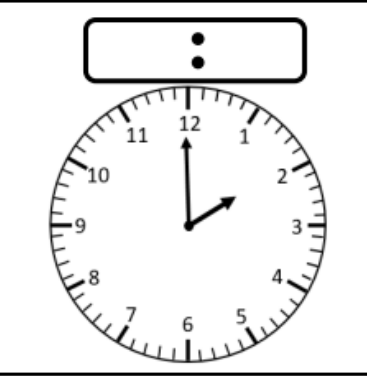
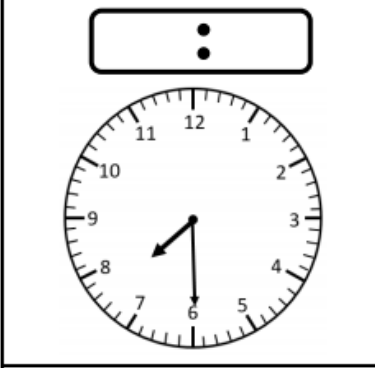
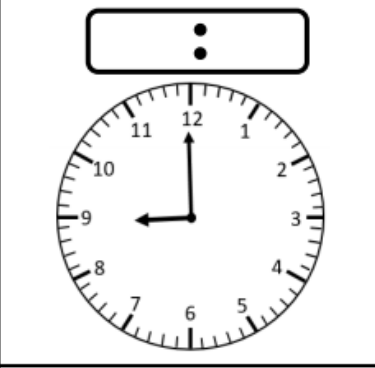
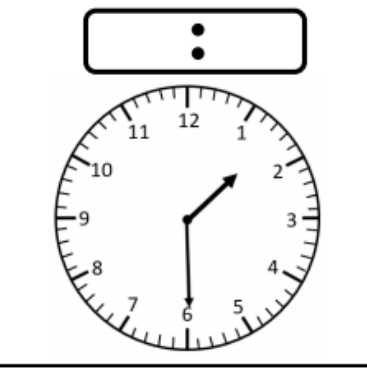
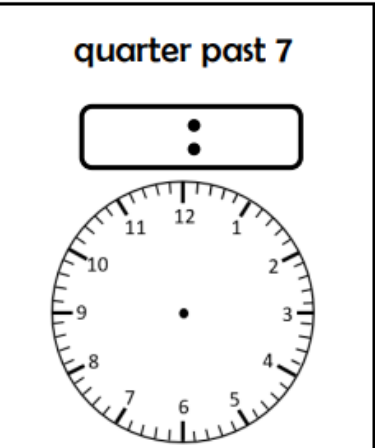
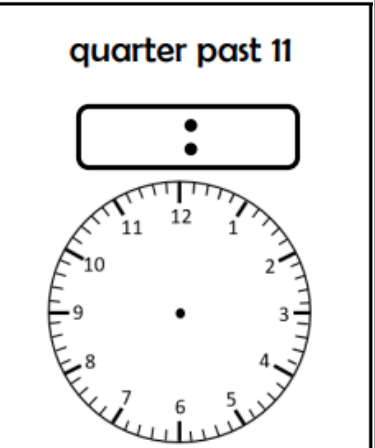
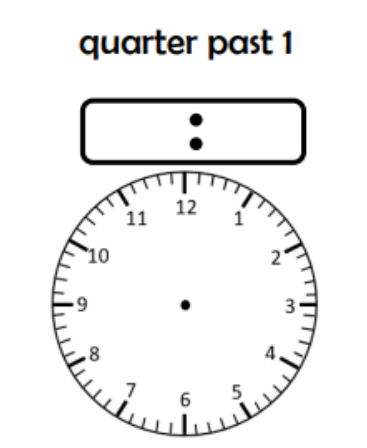
Minutes
past



Complete the blank digital and analogue times below



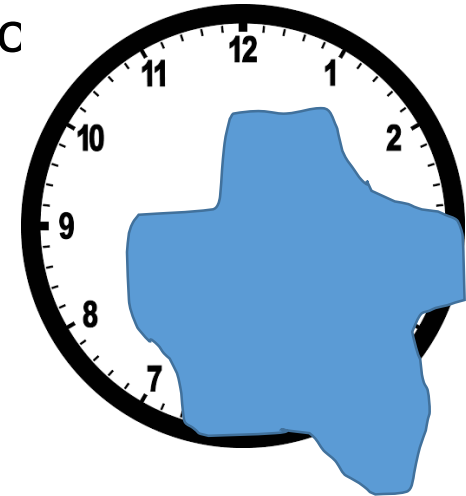
Main Tasks

		
		
<p>quarter past 7</p> 	<p>quarter past 11</p> 	<p>quarter past 1</p> 

Challenge

Both hands have been covered by ink. To the nearest **quarter of an hour**, what time could it be?

Record them in the digital format and in wc



_ _ : _ _ _ _ past _ _
 _ _ : _ _ _ _ past _ _
 _ _ : _ _ _ _ past _ _
 _ _ : _ _ _ _ past _ _

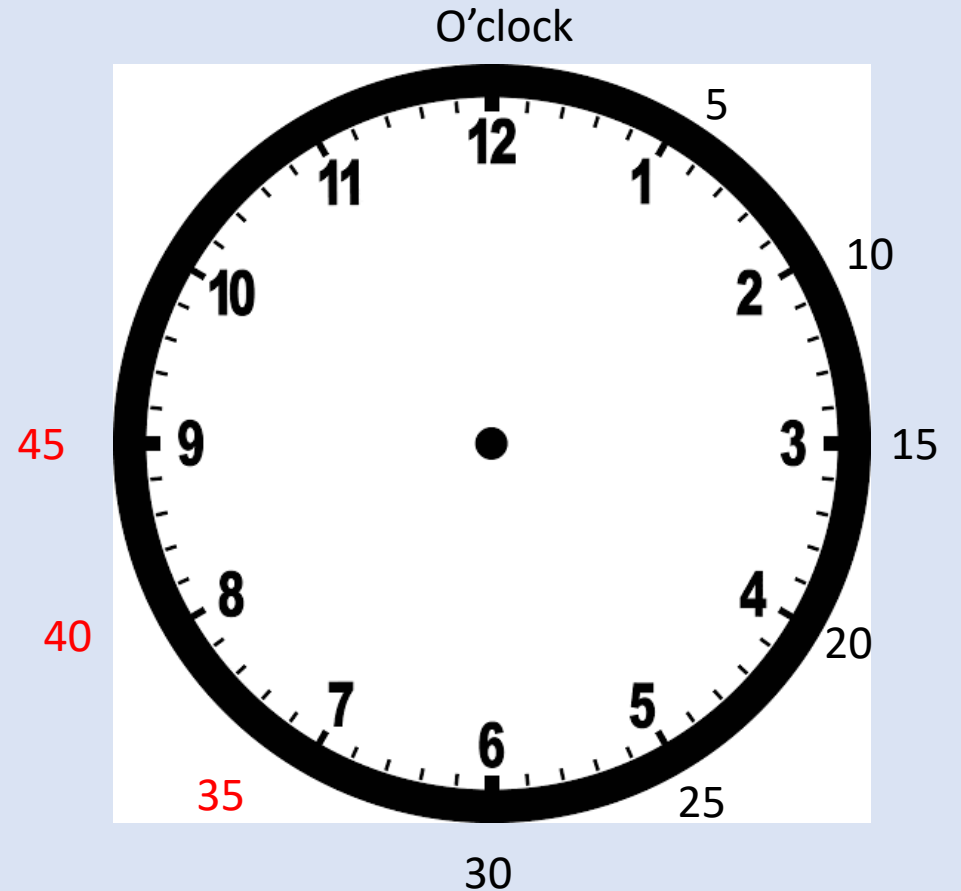
How many ways can you find?

Day 5 – Quarter to.

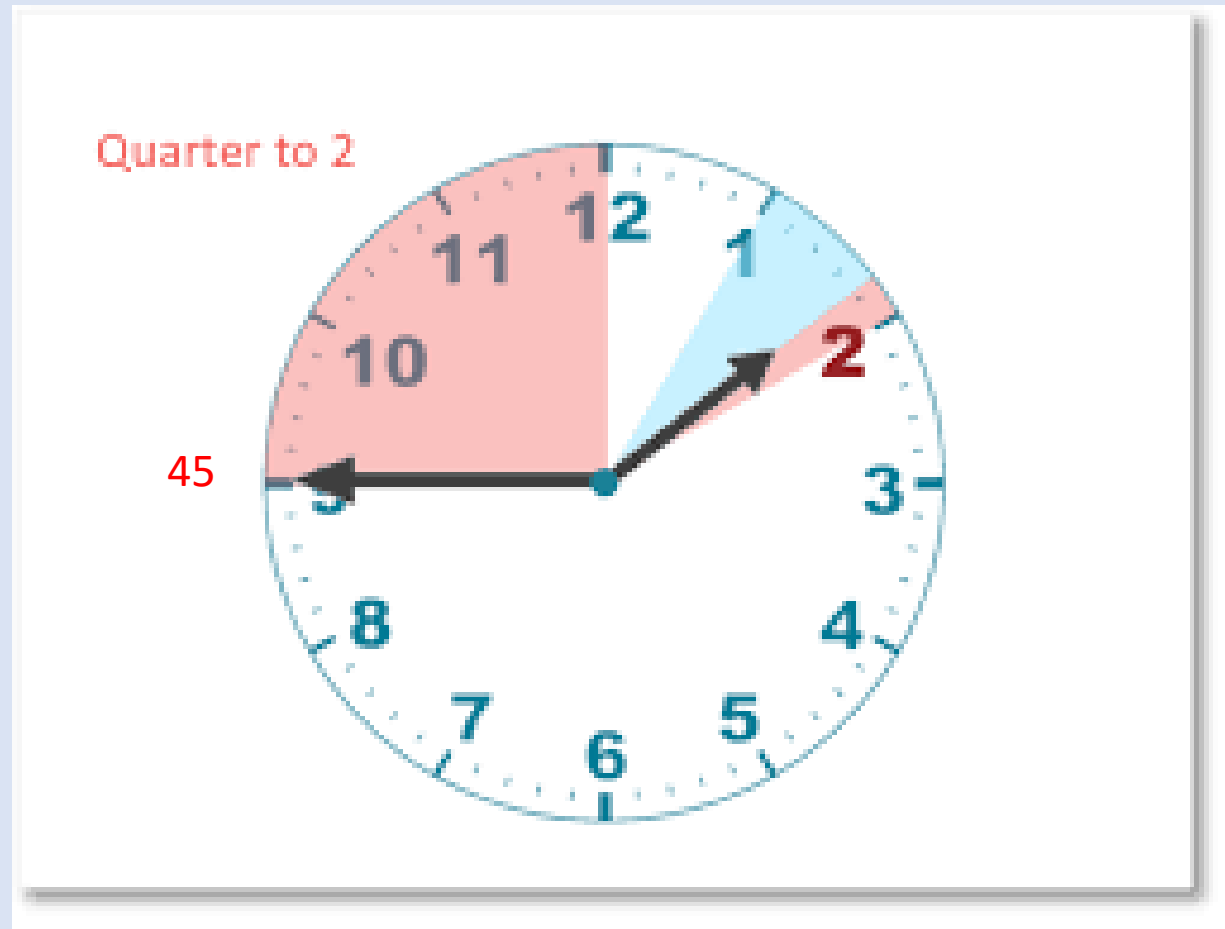
We have kept 'quarter to' separate as it works slightly different to o'clock, quarter past and half past on a digital clock.

On an analogue clock, when we pass half past, we start counting down to the next hour. However, on a digital clock, we carry on counting upwards and say that last hour, rather than the next hour.

Let's count round the clock in steps of five until we get to, what we would normally know as 'quarter to' on an analogue clock.



This shows us that quarter to is the same as 45 minutes past. If we are saying 45 minutes past, we need to say which hour it has past.



Here we can see the time is quarter to 2. Quarter to 2 is the same as 45 minutes after 1'clock. You can see here that the hour hand is past the one, but on the way to 2.

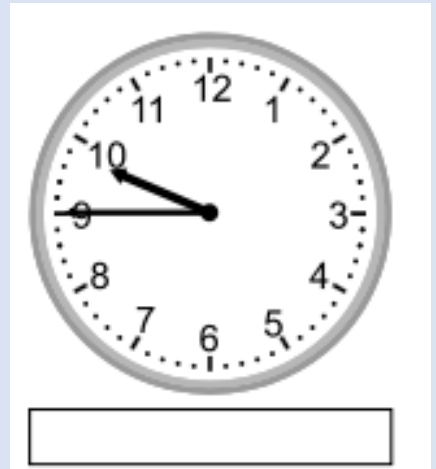
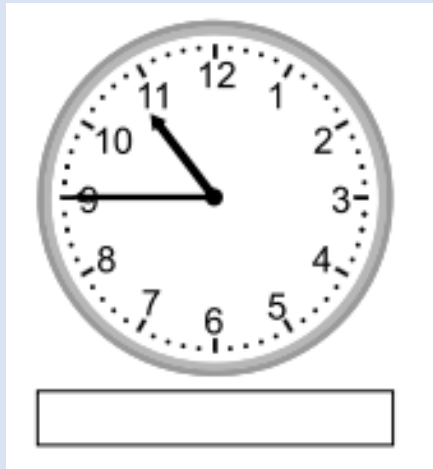
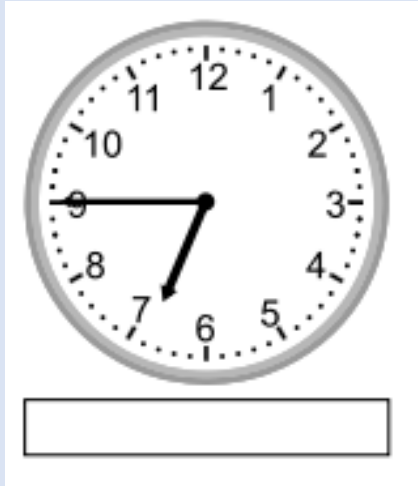
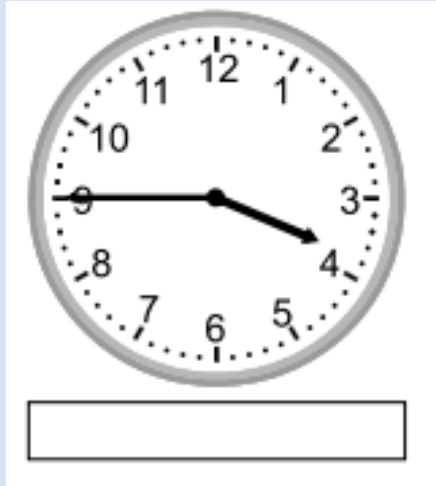
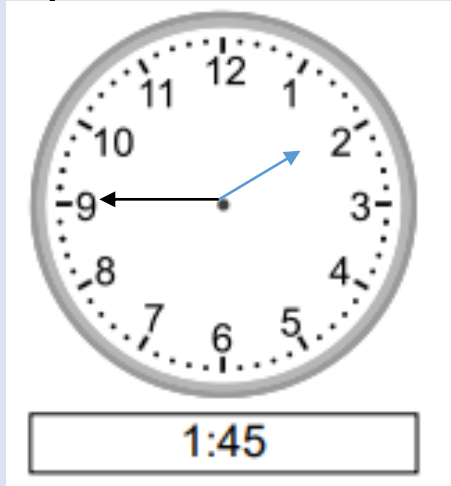
On a digital clock, Quarter to 2 looks like this because it is the same as 45 minutes past 1.



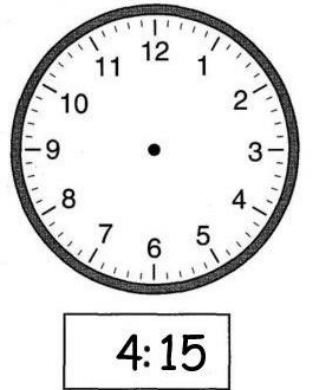
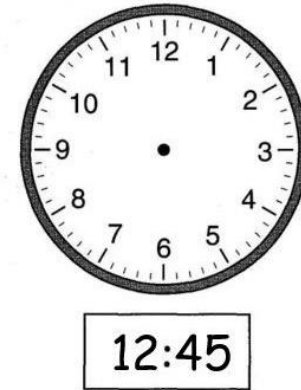
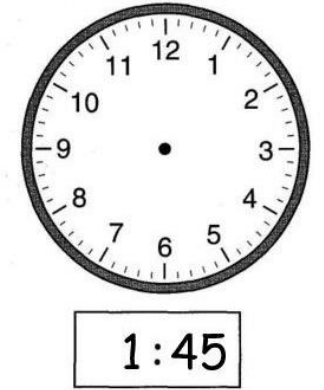
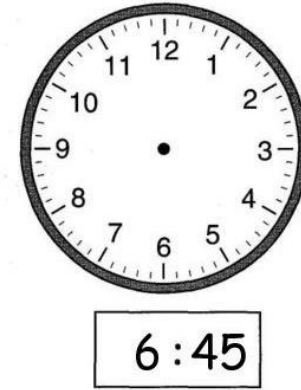
Task 2

Main Tasks

Complete the digital times below. One is done



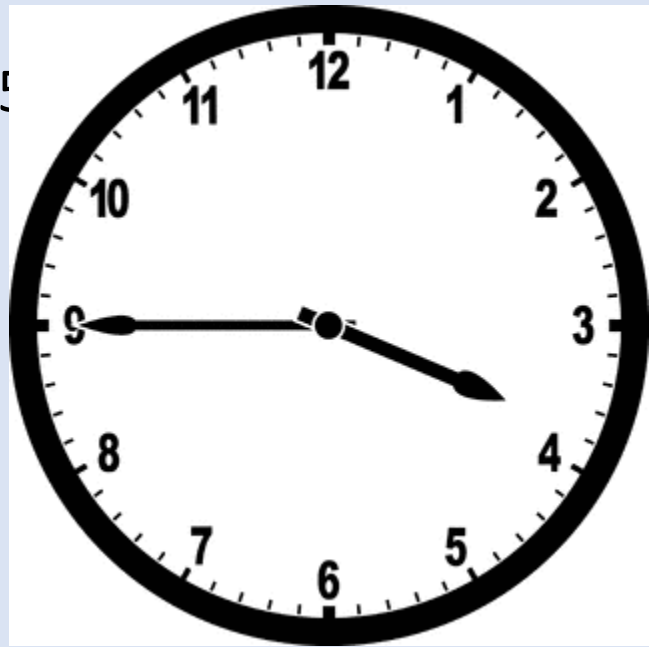
Complete these mixed times to the nearest quarter of an hour.



Challenges

Keira thinks that the digital version of this time is 3:45.

Sarah thinks it's 4:45!



What did they both get right?

Who wasn't completely right? What mistake was made by the person that got the time wrong?

Callum took photographs of his alarm clock at two different times. In the picture, we can only see the minutes.

His brother says that the second photograph was definitely taken after the first because it says 45 minutes past, and the first only says 15.

Do you agree with his brother? Why?

