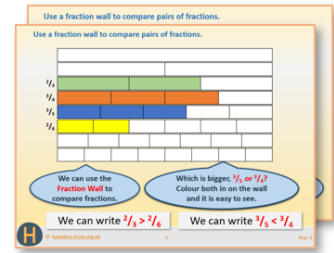


# Year 3: Week 3, Day 4

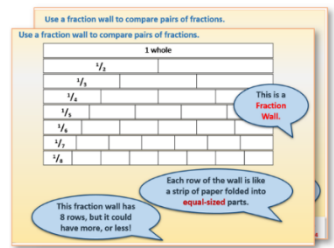
## Write and draw analogue and digital clock times

Each day covers one maths topic. It should take you about 1 hour or just a little more.

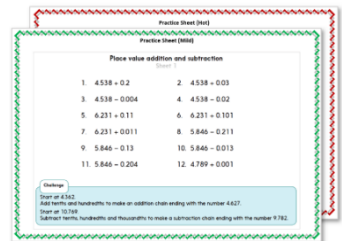
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



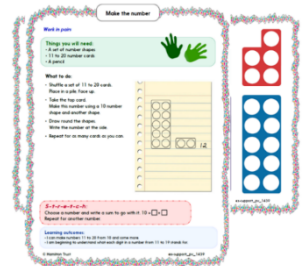
OR start by carefully reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



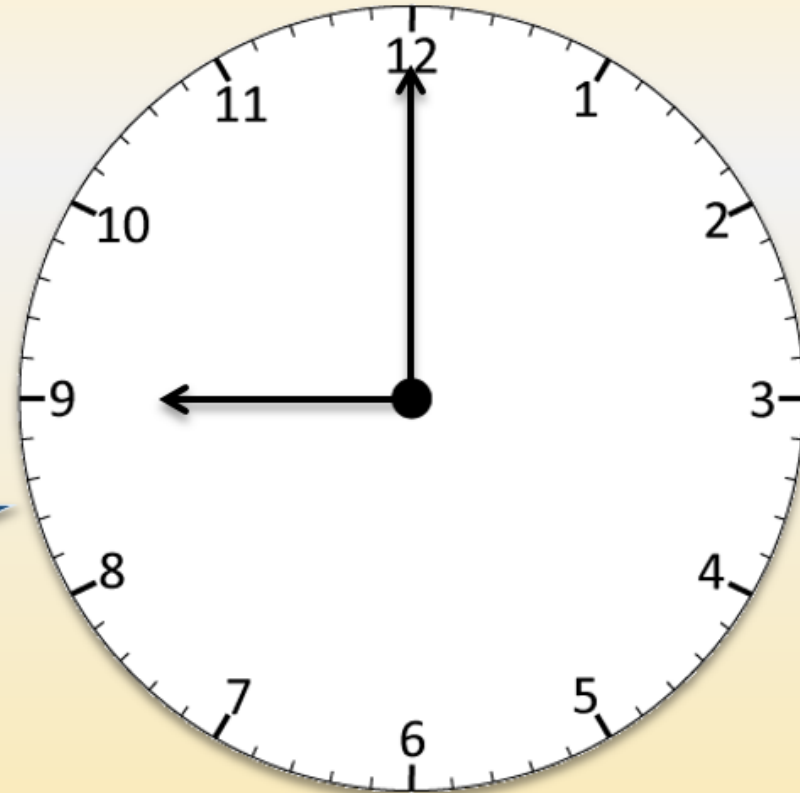
4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

## Learning Reminders

Write and draw corresponding analogue and digital clock times.

The clock is showing 9 o'clock.

Where will each hand be in half an hour?



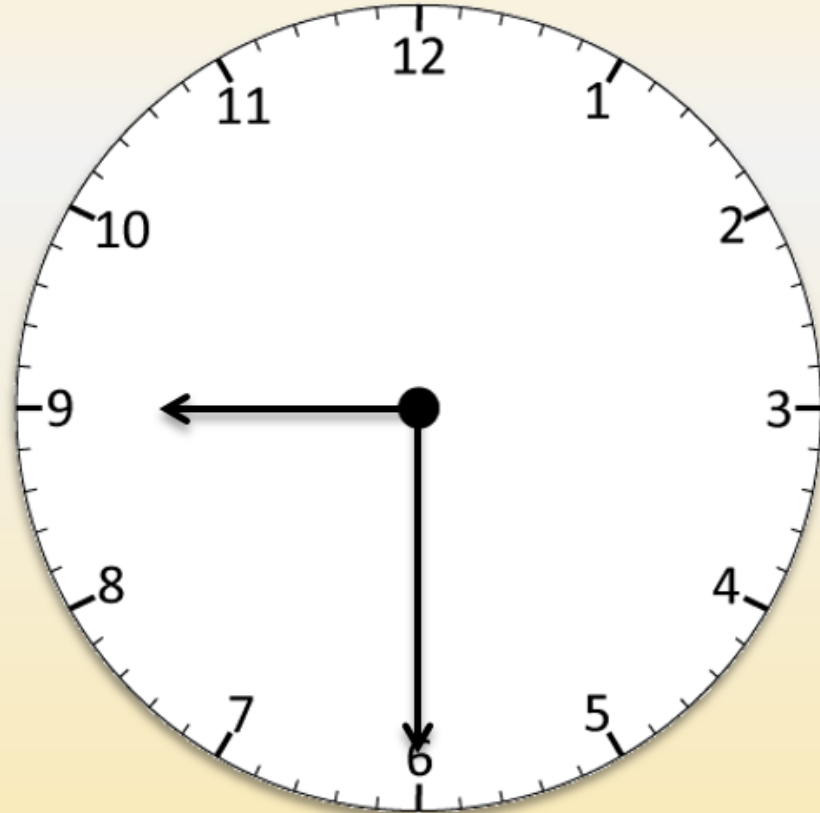
9:00

Don't forget to separate hours from minutes with a colon.

## Learning Reminders

Write and draw corresponding analogue and digital clock times.

Half past 9




9:30

Did you remember the colon?

# Learning Reminders

Write and draw corresponding analogue and digital clock times.


**9:05** 5 past 9



Let's count around the clock in 5 minute intervals...

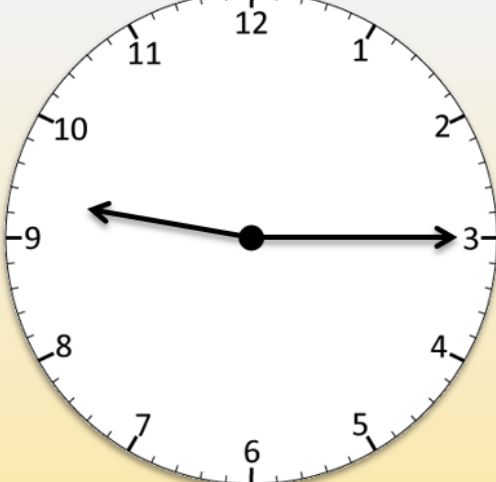
The image shows a large analog clock with the hour hand pointing to 9 and the minute hand pointing to 1. To the right of the clock is a box containing the digital time '9:05' and the text '5 past 9'. Further to the right is a blue speech bubble containing the text 'Let's count around the clock in 5 minute intervals...'.

**9:10** 10 past 9




The image shows an analog clock with the hour hand pointing to 9 and the minute hand pointing to 2. To the right of the clock is a box containing the digital time '9:10' and the text '10 past 9'.

**9:15** quarter past 9




The image shows an analog clock with the hour hand pointing to 9 and the minute hand pointing to 3. To the right of the clock is a box containing the digital time '9:15' and the text 'quarter past 9'.

**9:20** 20 past 9



The image shows an analog clock with the hour hand pointing to 9 and the minute hand pointing to 4. To the right of the clock is a box containing the digital time '9:20' and the text '20 past 9'.

**9:25** 25 past 9

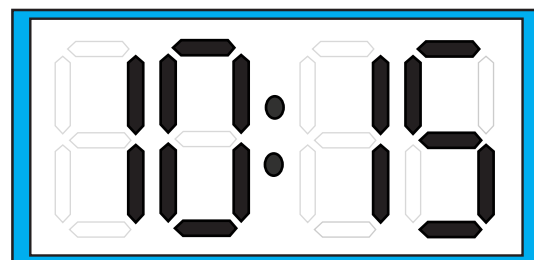
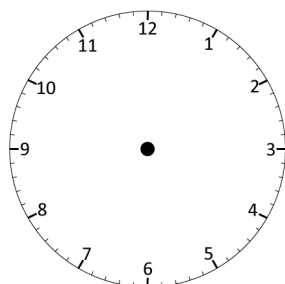
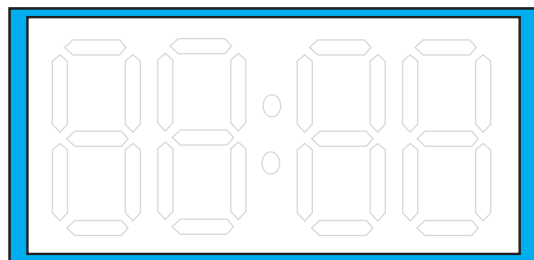
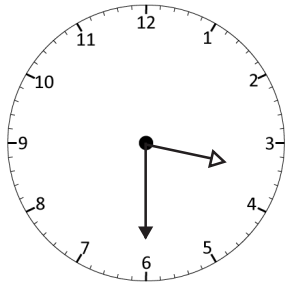
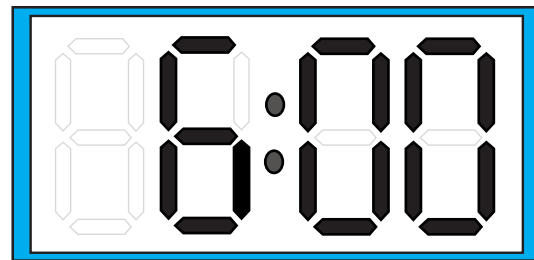
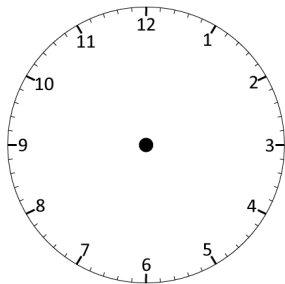
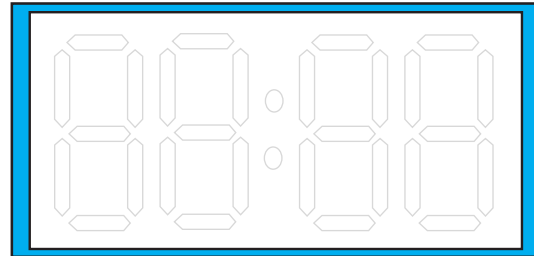
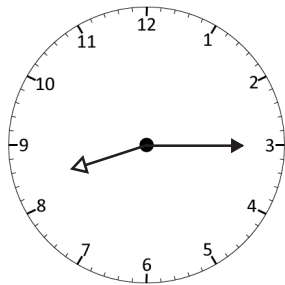
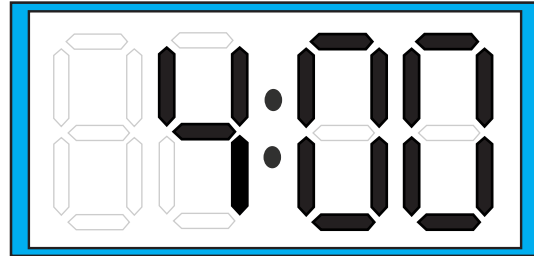
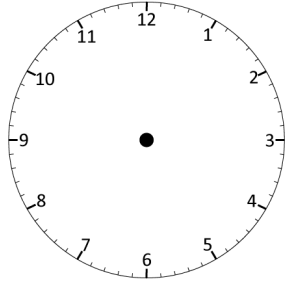


The image shows an analog clock with the hour hand pointing to 9 and the minute hand pointing to 5. To the right of the clock is a box containing the digital time '9:25' and the text '25 past 9'.

## Practice Sheet Mild

### Analogue and digital clock times

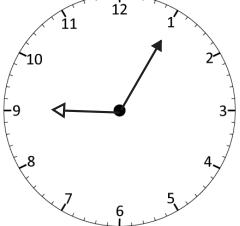
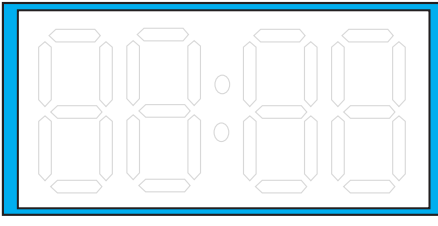
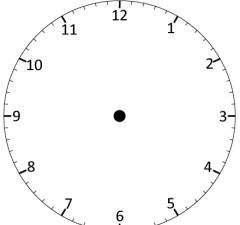

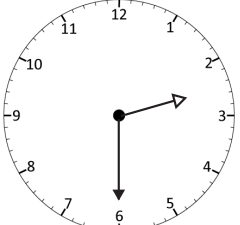
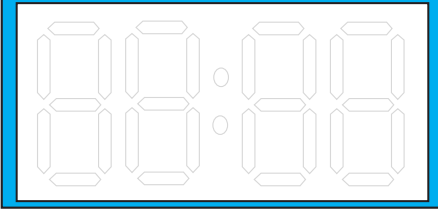
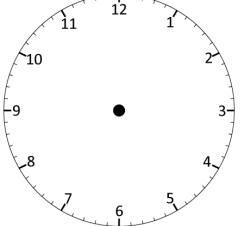
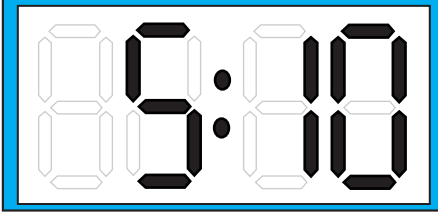
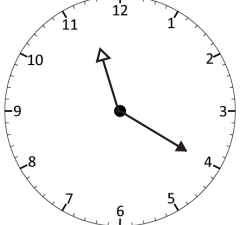
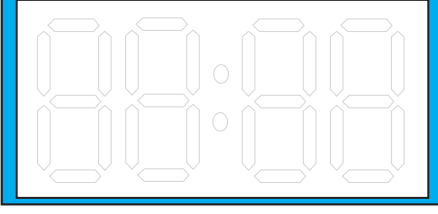
Draw hands on the clock, or fill in the digital display to show the matching analogue or digital clock times.



## Practice Sheet Mild

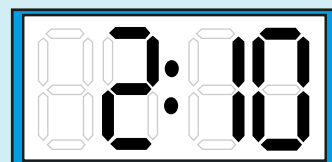
### Analogue and digital clock times

Draw hands on the clock, or fill in the digital display to show the matching analogue or digital clock times.

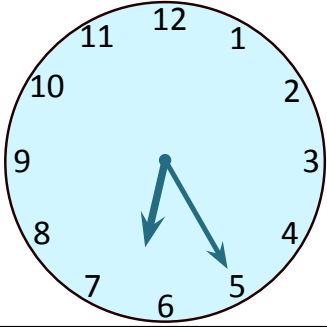
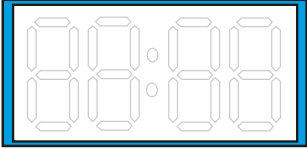
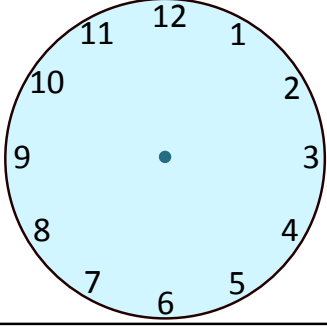
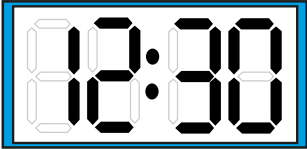
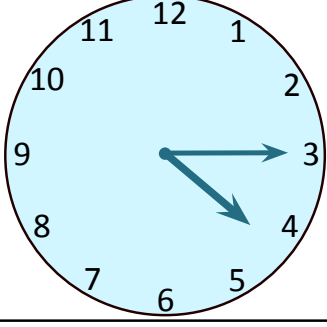
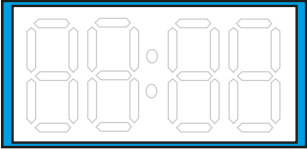
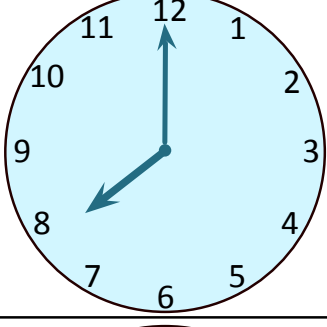
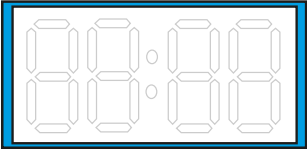
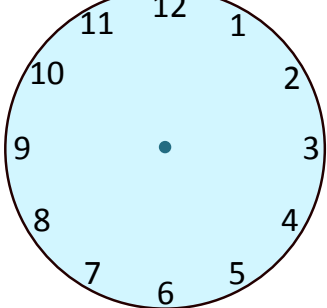
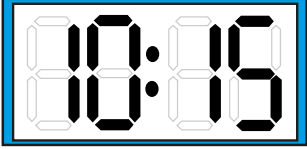
#### Challenge

Reflect this time in a mirror, horizontally and vertically.  
What time does it show?  
Can you draw them on an analogue clock?



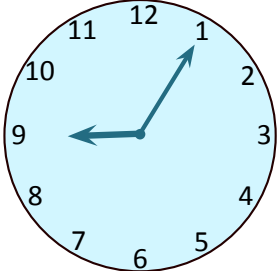

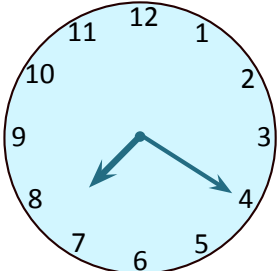
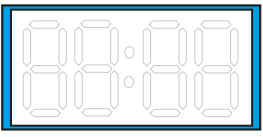
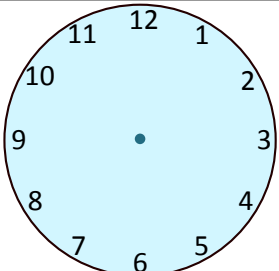
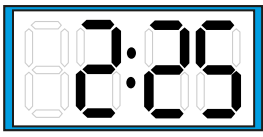
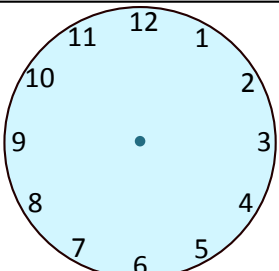
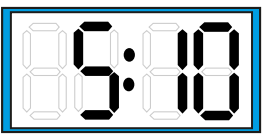
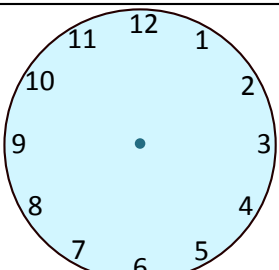
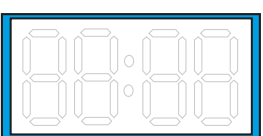
## Practice Sheet Mild

### Reading the time on analogue and digital clocks

		
		
		
		<b>8 o'clock</b>
		

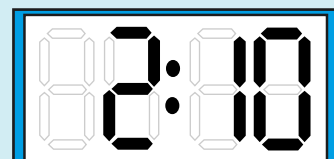
## Practice Sheet Mild

### Reading the time on analogue and digital clocks

		
		20 past 7
		25 past 2
		
		5 past 10

#### Challenge

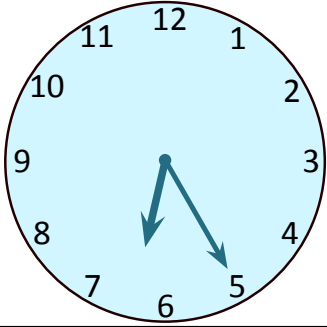
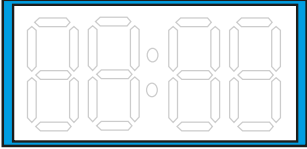
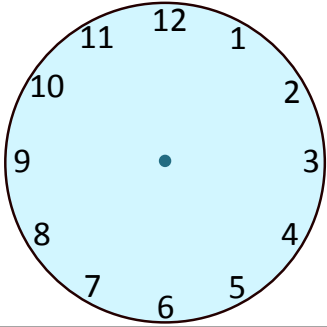
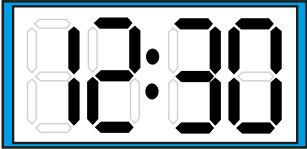
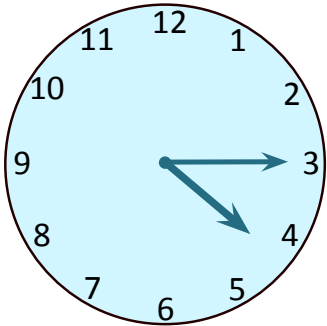
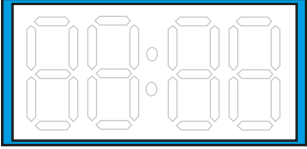
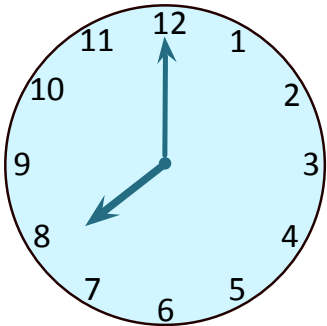
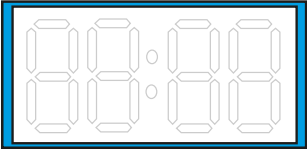
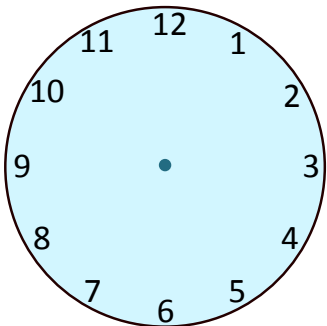
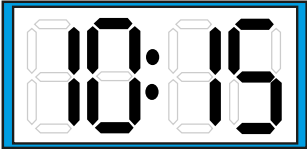
Reflect this time in a mirror, horizontally and vertically.  
What time does it show?  
Can you draw them on an analogue clock?





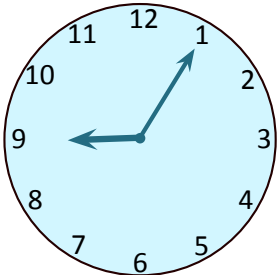

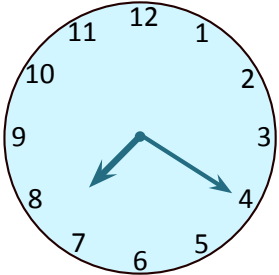
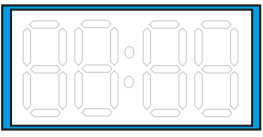
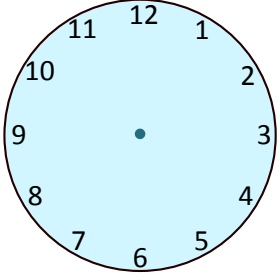
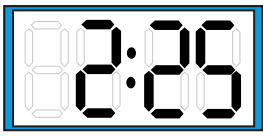
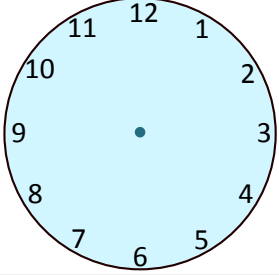
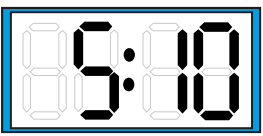
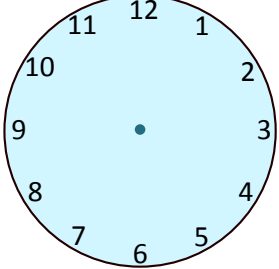
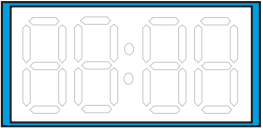
## Practice Sheet Hot

### Reading the time on analogue and digital clocks

		
		
		
		8 o'clock
		

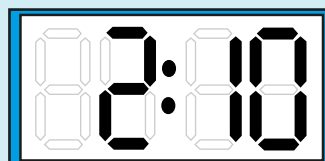
## Practice Sheet Hot

### Reading the time on analogue and digital clocks

		
		<b>20 past 7</b>
		<b>25 past 2</b>
		
		<b>5 past 10</b>

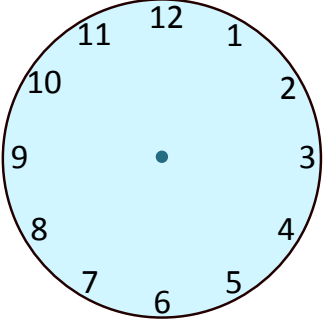

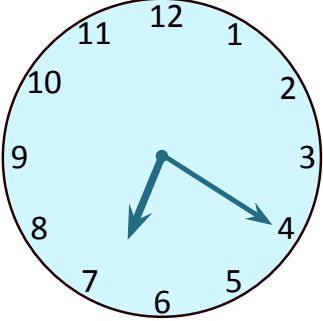
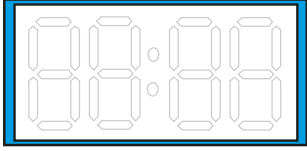
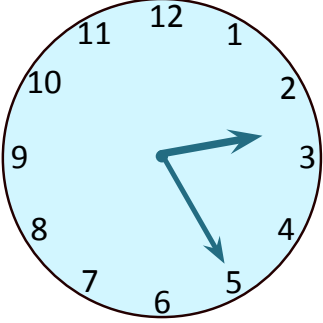
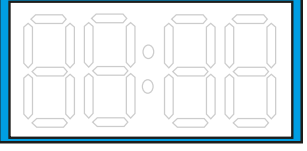
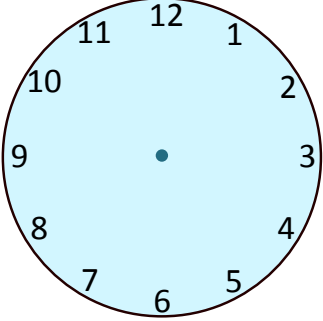
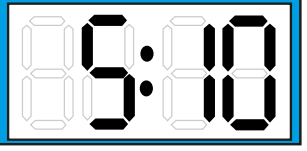
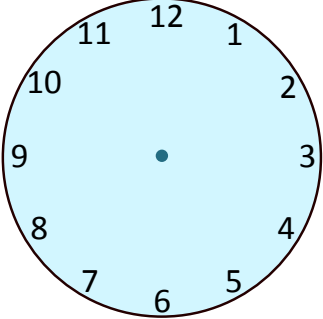
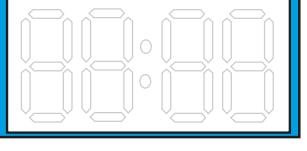
#### Challenge

Reflect this time in a mirror, horizontally and vertically.  
 What time does it show?  
 Can you draw them on an analogue clock?



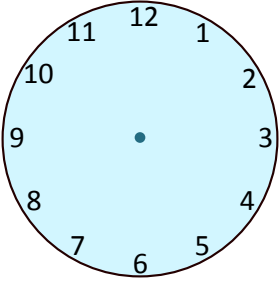
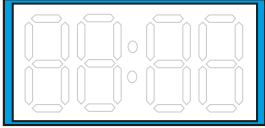
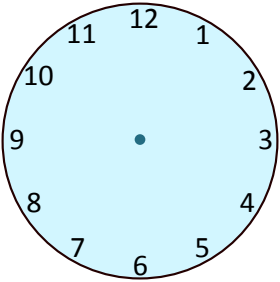
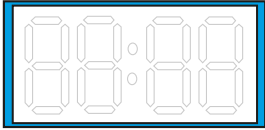
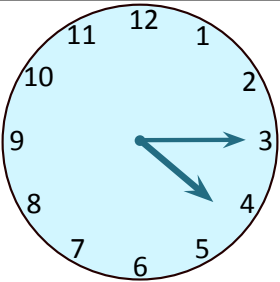
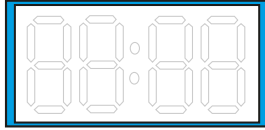
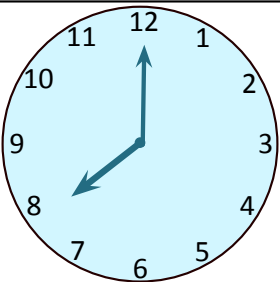
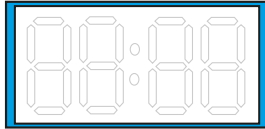
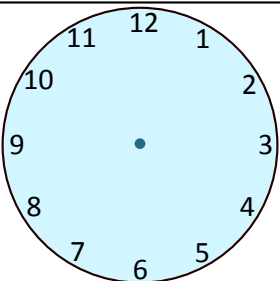
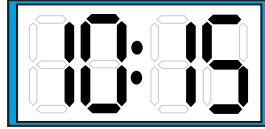
# Practice Sheet Hot

## Reading the time on analogue and digital clocks

		
		
		<b>25 past 2</b>
		
		<b>5 past 10</b>

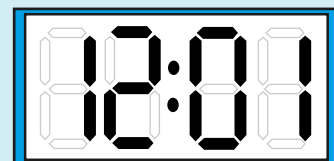
# Practice Sheet Hot

## Reading the time on analogue and digital clocks

		25 past 1
		half past 12
		
		
		


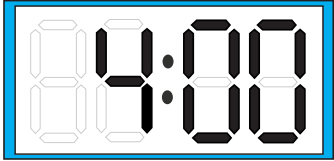

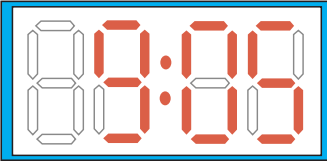
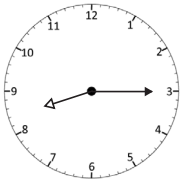
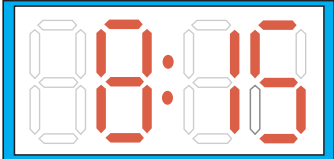

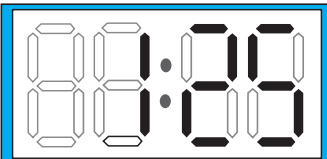
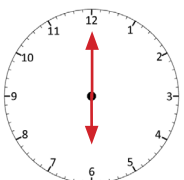
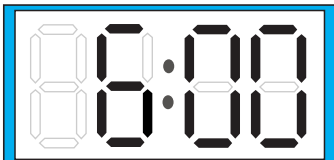
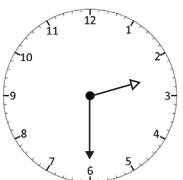
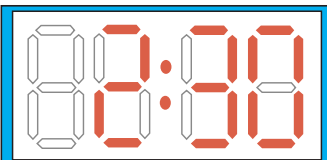
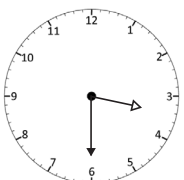
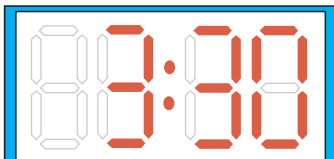
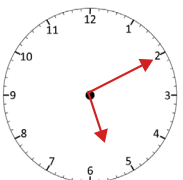
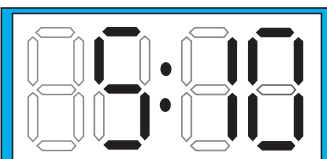

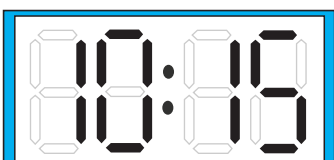
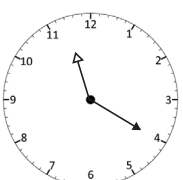
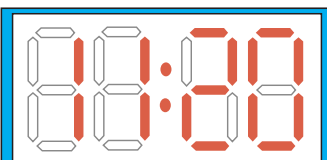
### Challenge

Reflect this time in a mirror, horizontally and vertically.  
What time does it show?  
Can you draw them on an analogue clock?

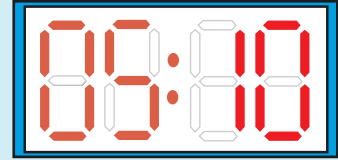
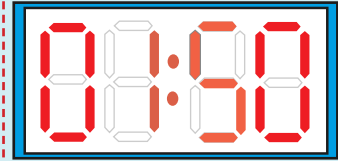


# Practice Sheet Answers

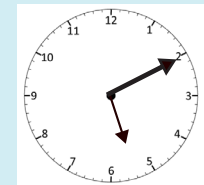
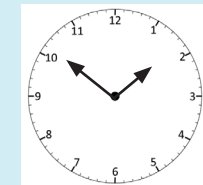
## Analogue and digital clock times (mild)

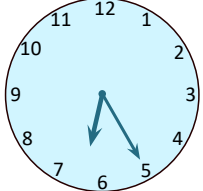

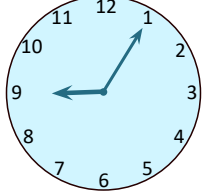

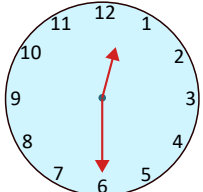

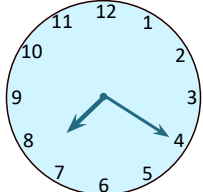
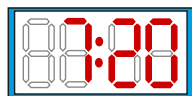
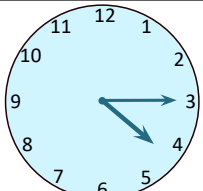
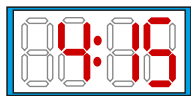
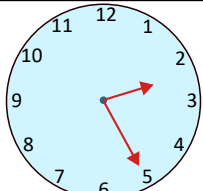

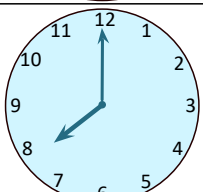

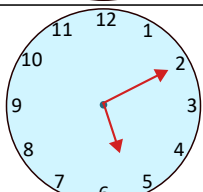
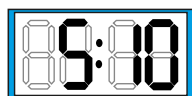
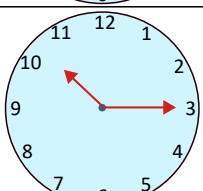

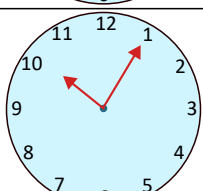

### Challenge



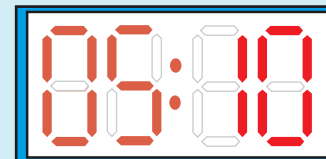
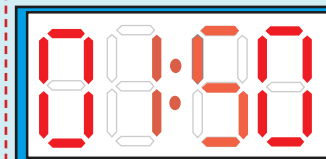
02:10 reflects horizontally  
in the mirror as 01:50 and  
vertically as 05:10



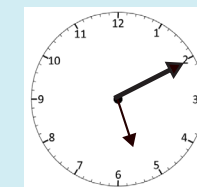
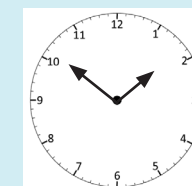
Reading the time on analogue and digital clocks (mild and hot)

		25 past 6			5 past 9
		half past 12			20 past 7
		quarter past 4			25 past 2
		8 o'clock			10 past 5
		quarter past 10			5 past 10

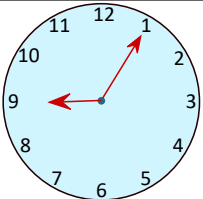
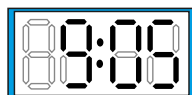
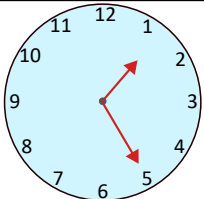
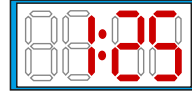
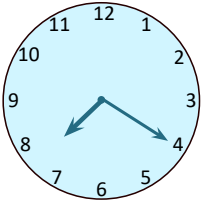
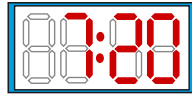
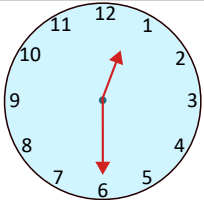
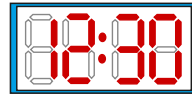
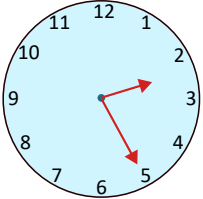

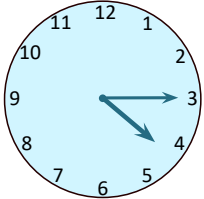
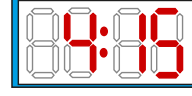
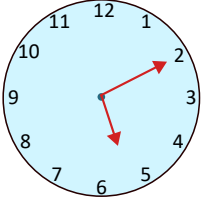
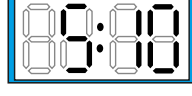
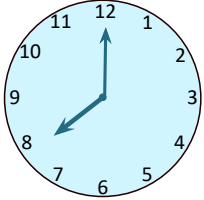

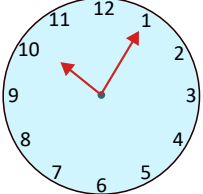

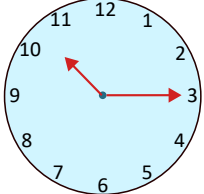
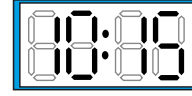
Challenge



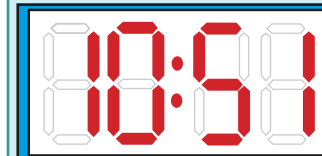
02:10 reflects horizontally in the mirror as 01:50 and vertically as 05:10



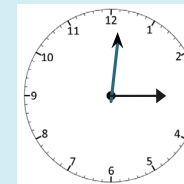
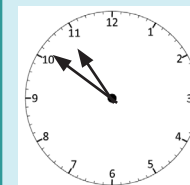
## Reading the time on analogue and digital clocks (hot)

		5 past 9			25 past 1
		20 past 7			half past 12
		25 past 2			quarter past 4
		10 past 5			8 o'clock
		5 past 10			quarter past 10

### Challenge



12:01 reflects horizontally in the mirror as 10:51 and vertically as 15:01



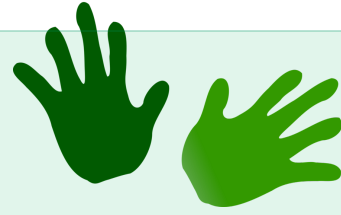
## A Bit Stuck?

Pink past and blue to

### Work in pairs

#### Things you will need:

- A set of time cards
- A pencil



#### What to do:

- Shuffle the cards. Place face down.
- Take the top card. Read the time, e.g.  $\frac{1}{4}$  past 5. Write this time how we say it. Write the matching digital time.
- Repeat.

1. $\frac{1}{4}$ past 5	5:15
2. $\frac{1}{2}$ past 6	

#### **S-t-r-e-t-c-h:**

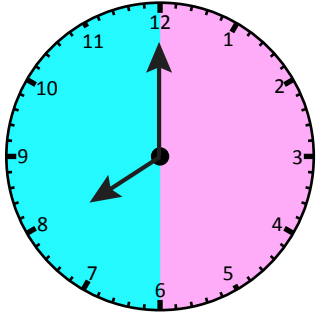
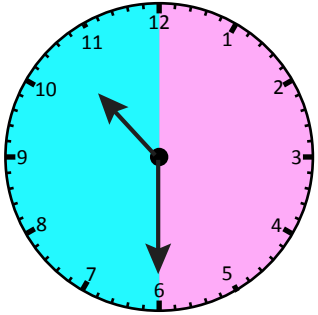
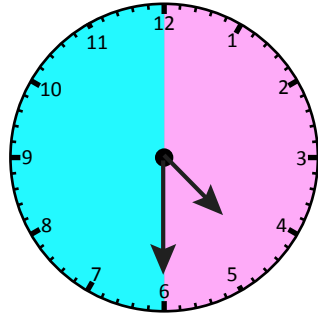
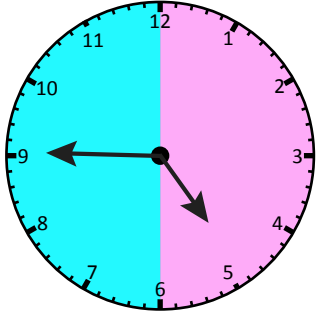
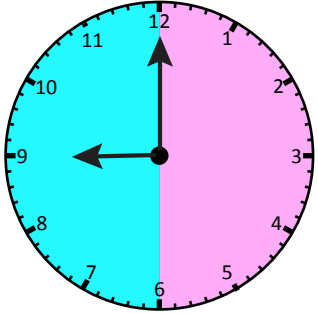
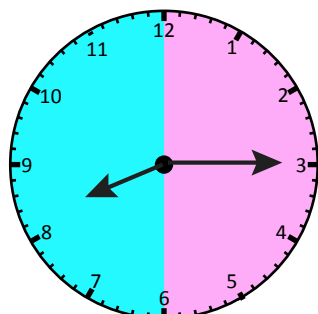
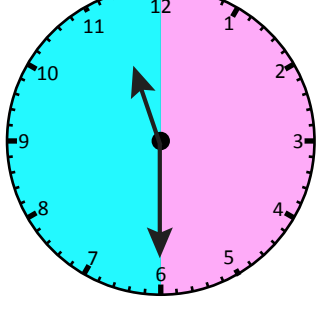
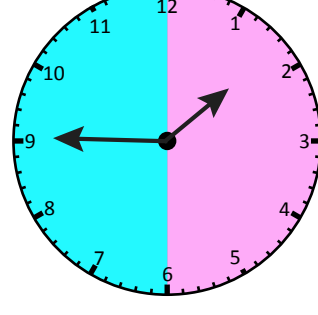
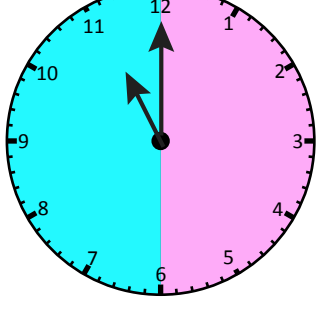
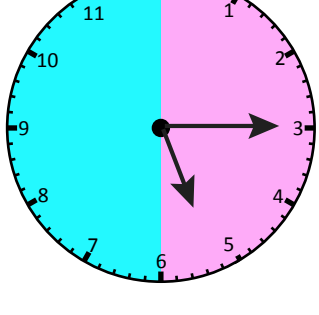
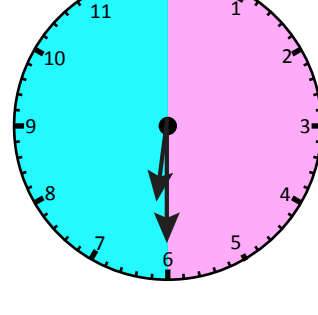
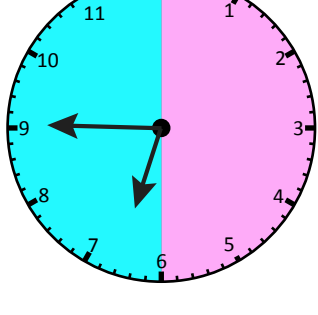
Write three times between 10 o'clock and 11 o'clock. Write them in words as we say the time on an analogue clock and using numbers how they are shown on a digital clock.

#### Learning outcomes:

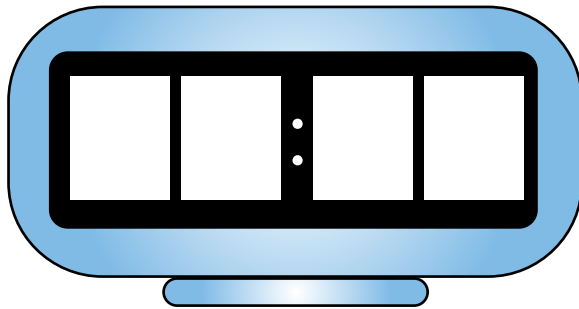
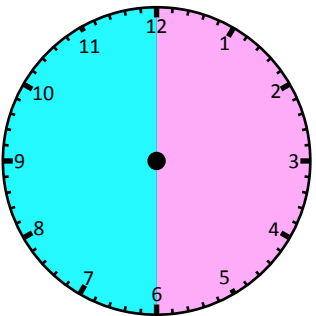
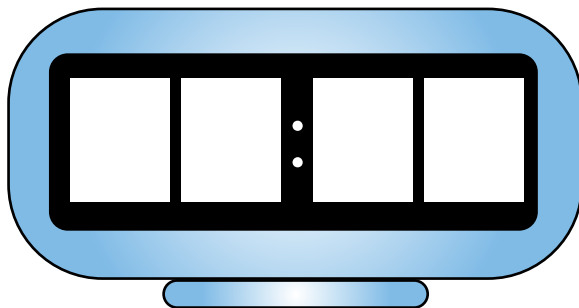
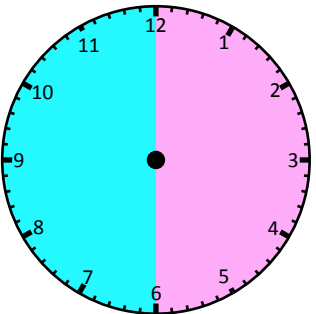
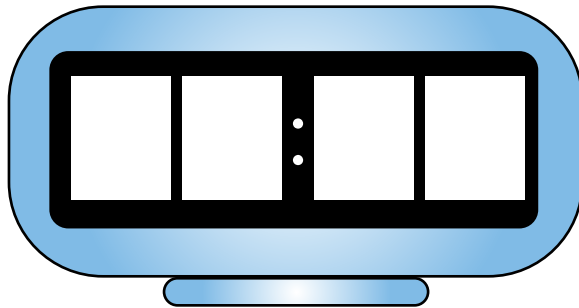
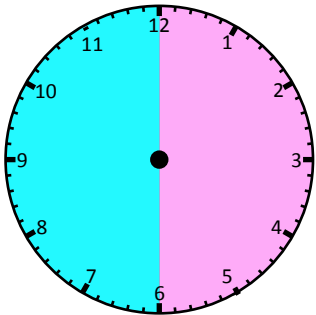
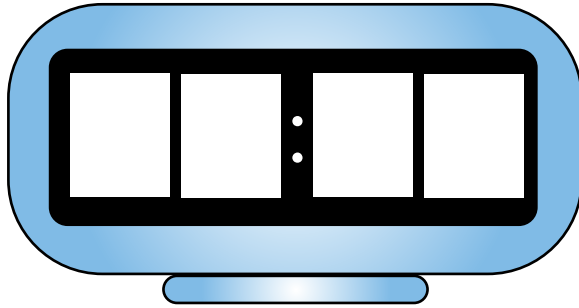
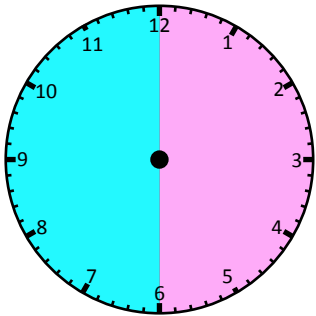
- I can tell the time to the quarter hour on analogue and digital clocks.



**A Bit Stuck?**  
Pink past and blue to

**A Bit Stuck?**  
Pink past and blue to



## Investigation

### Dodgy digital clock

- Ahmed's bedside digital clock is not working properly. One segment of the display doesn't light up.

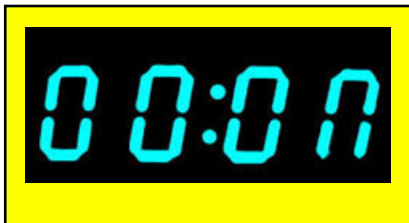


- Which numbers won't display properly?



- Work out how many times between 10:00 and 11:00 won't display properly.

- What if this segment had been broken instead? Would that make a difference to how many times would display correctly? Why/why not?



- Choose a segment which, if broken, would show fewer wrongly displayed times between 10:00 and 11:00 than the one which broke on Ahmed's clock.

digits spoiled	digits not spoiled
0	1