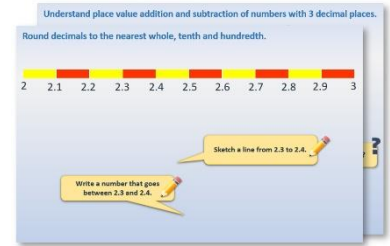


Week 9, Day 3

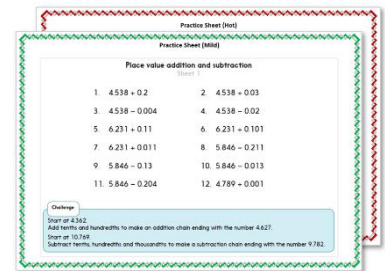
Tell the time to the minute

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

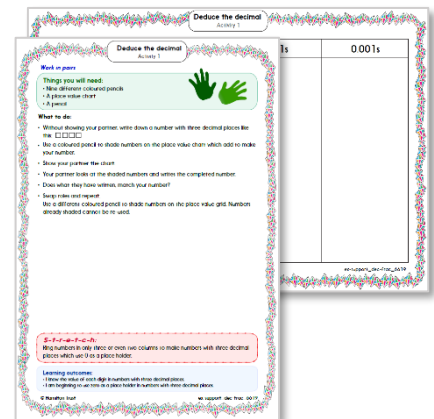
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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

Revise am and pm.

7:40am

7pm

2:30am

3:15pm

What might you be doing at each of these times? Remember the difference between **am** and **pm**!

Let's put the times in order from earliest to latest...

2:30am

7:40am

3:15pm

7pm

Definitely sleeping!

Eating breakfast

Leaving school

Cleaning my teeth before bedtime

Learning Reminders

Begin to tell the time to the nearest minute.



Each small division
on the clock face
represents just 1
minute....

So what time is this
clock showing?
7 minutes past 10
10:07

Learning Reminders

Begin to tell the time to the nearest minute.



What time is the clock showing?
Quarter to 11
10:45

How many minutes until 11 o'clock?

Count in 5s anti-clockwise from 12 until you reach the minute hand...
15 minutes

Begin to tell the time to the nearest minute.



How many minutes until 11 o'clock?

Count back in 5s from 12, then add 2 more minutes!

So what time is the clock showing?
22 minutes to 11

How many minutes past 10 o'clock? So we can also write the time as **10:38**.

Learning Reminders

Begin to tell the time to the nearest minute.



How many minutes past 10 o'clock?

How many minutes until 11 o'clock?

Count back carefully from the top to check.

So what time is the clock showing?

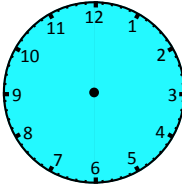
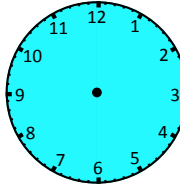
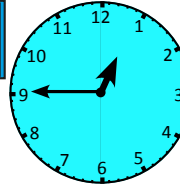
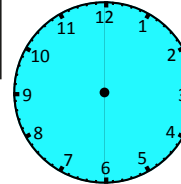
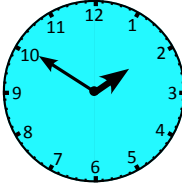
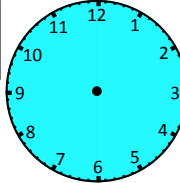
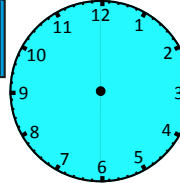
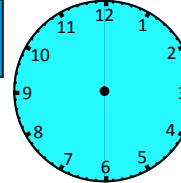
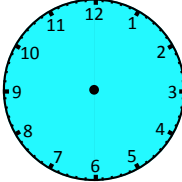
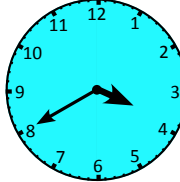
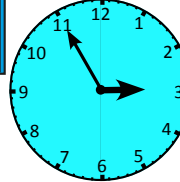
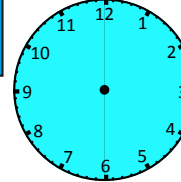
10:54

6 minutes to 11

Practice Sheet Mild

Missing times

Write/draw equivalent times for each of these:

<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">25 to 3</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">7:45</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">8:05</div>  </div>
<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">2:40</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">quarter past 12</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">7:35</div>  </div>
<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">20 to 1</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; height: 40px; width: 100%;"></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">5 to 8</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">00:00</div>  </div>

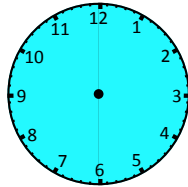
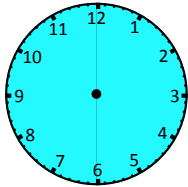
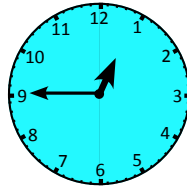
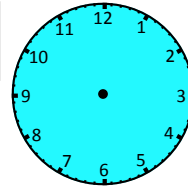
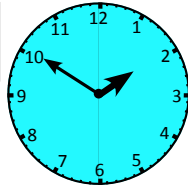
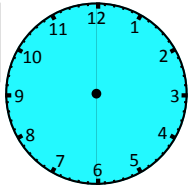
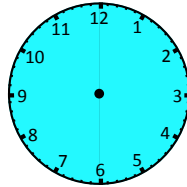
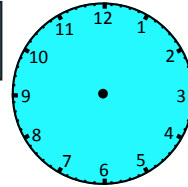
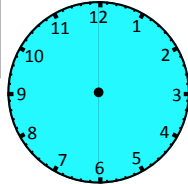
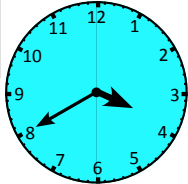
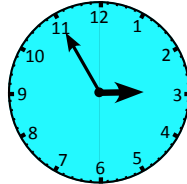
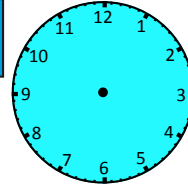
Challenge

Write three times between 8:05 and 8:25.

Practice Sheet Hot

Missing times

Write/draw the equivalent times for each of these.




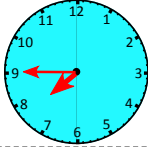

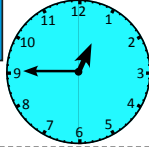

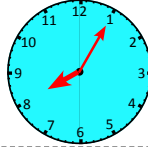

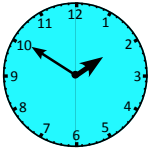

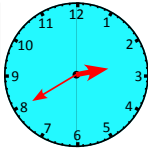

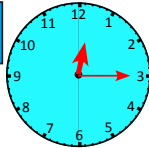

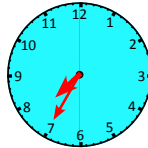

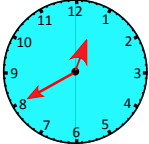

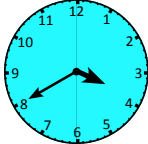

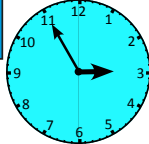

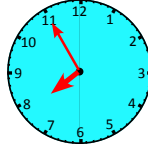
<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">25 to 3</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">07:45</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">08:05</div>  </div>
<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">02:48</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">quarter past 12</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">07:37</div>  </div>
<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">27 minutes past 1</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 0 auto;">26 minutes to 8</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">00:00</div>  </div>

Challenge

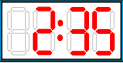
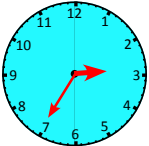

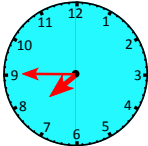

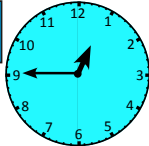



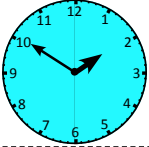

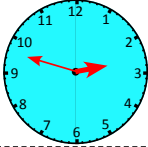

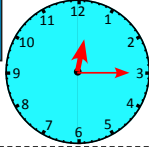

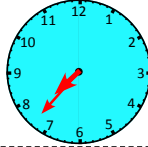

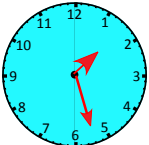

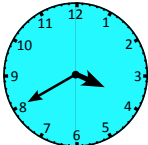

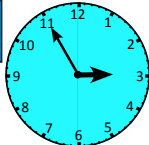


These times are all between 8 am and 8 pm. Can you write these times from earliest to latest?

Practice Sheet Answers

Missing times Mild

25 to 3  	quarter to 8  	quarter to 1  	5 past 8  
10 to 2  	20 to 3  	quarter past 12  	25 to 8  
20 to 1  	20 to 4  	5 to 3  	5 to 8  

Missing times (hot)

25 to 3  	quarter to 8  	quarter to 1  	5 past 8  
10 to 2  	12 minutes to 3  	quarter past 12  	23 minutes to 8  
27 minutes past 1  	20 to 4  	5 to 3  	26 minutes to 8  

Challenge

The times in order from earliest to latest are:

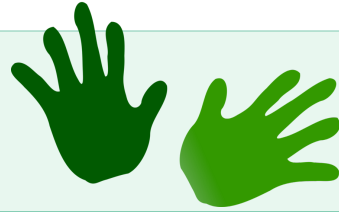
8:05, 12:15, 12:45, 1:27, 1:50, 2:35, 2:48, 2:55, 3:40, 7:35, 7:37, 7:45

A Bit Stuck? Match the times

Work in pairs

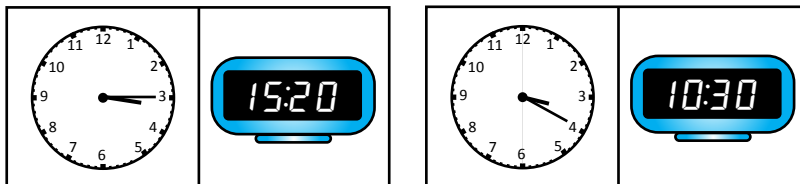
Things you will need:

- A set of dominoes



What to do:

- Work in pairs to make a loop out of the time dominoes.
- Touching ends must have matching times, one analogue and the other digital.



- Can you use all the dominoes in your loop?

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

Find pairs of dominoes such that the time on one side is 5 minutes before or later than the time on the other side.

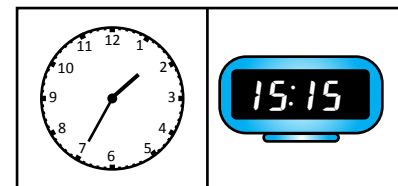
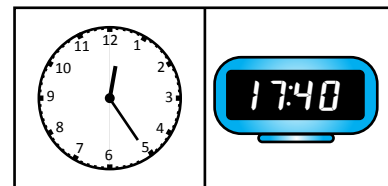
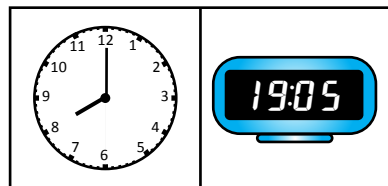
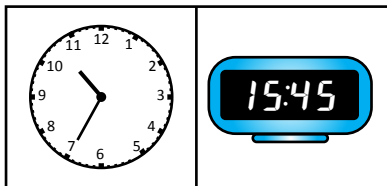
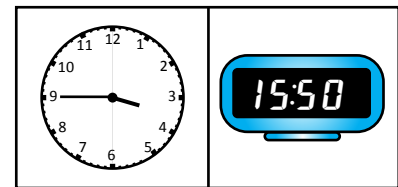
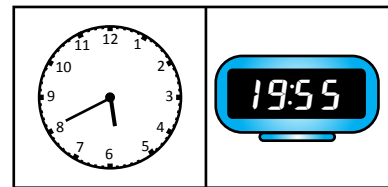
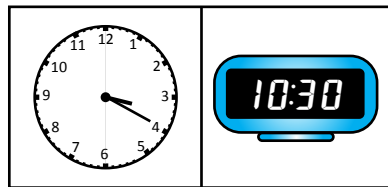
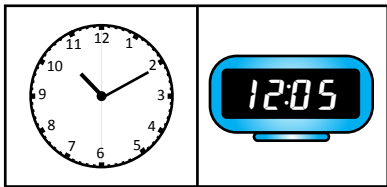
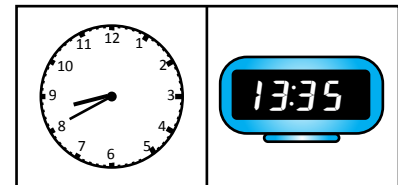
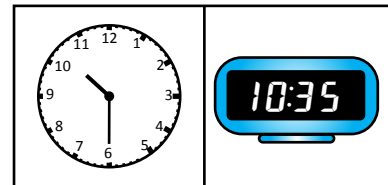
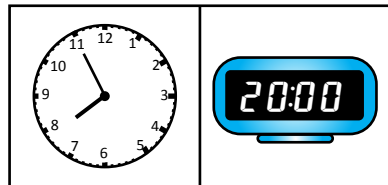
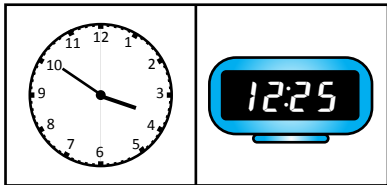
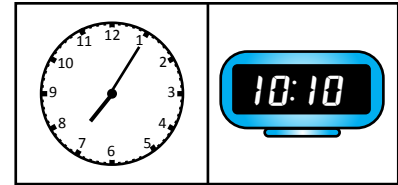
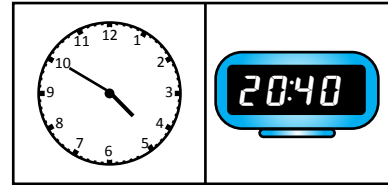
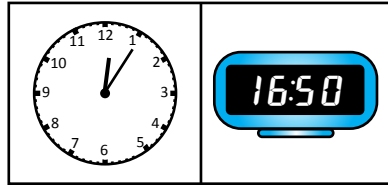
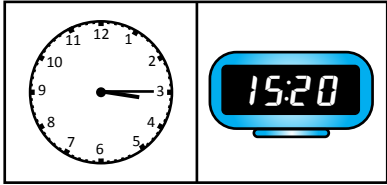
How many are there?

Learning outcomes:

- I can tell the time to 5 minutes on analogue and digital clocks.
- I am beginning to say the time 5 minutes before or after o'clock, $\frac{1}{4}$ past, $\frac{1}{2}$ past and $\frac{1}{4}$ to times.

A Bit Stuck?

Match the times



Investigation

All the eights

Your challenge is to find how many times the digit 8 appears on a digital clock in a day, that is from midnight to midnight. The clock is one which shows am and pm times not 24-hour times, e.g

2:48pm

HELPFUL HINTS

*First think about each hour from midnight to midday.
How many times does the digit appear between midnight and 1am?*

0:08

0:18

0:28

And how many more times like this before 1am?

Now continue in this way...

- How many times will the digit 8 appear between 1am and 2am?
- Between 2am and 3am?
- Will it appear the same number of times each hour?
- Which hour will be different? How many times will the digit appear in that hour?

STRATEGIES to try...

You do not need to write out all the digital times in which '8' appears... You just need to count the number of times there are.

Once you have found how many times the digit 8 appears between midnight and midday, what do you think you could do next?

Further challenge

- Which other digits do you think will appear the same number of times as the digit 8?
- Which will appear a different number of times? Why?