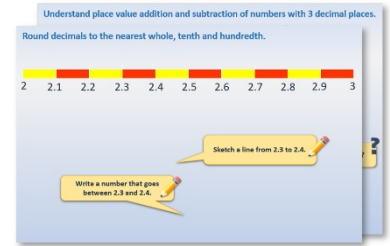


Year 3: Week 5, Day 4

Time intervals

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.

Practice Sheet (Hot)

Practice sheet (Mild)

Place value addition and subtraction

1. $4.538 + 0.2$	2. $4.538 + 0.03$
3. $4.538 - 0.004$	4. $4.538 - 0.02$
5. $6.231 + 0.11$	6. $6.231 + 0.101$
7. $6.231 + 0.011$	8. $5.846 - 0.211$
9. $5.846 - 0.13$	10. $5.846 - 0.013$
11. $5.846 - 0.204$	12. $4.789 + 0.001$

Challenge

Start at 4.542. Add tenths and hundredths to make an addition chain ending with the number 4.627. Start at 10.349. Subtract tenths, hundredths and thousandths to make a subtraction chain ending with the number 9.782.

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

Deduce the decimal

Activity 1

What you need:

- 1000 counters
- 100 counters
- 10 counters
- 1 counter

What to do:

- Shuffle about your partner, write down a number with three decimal places like 0.1234.
- Use 1000 counters to show numbers on the place value chart which add to make your number.
- Hide your partner the chart.
- Your partner looks at the shaded numbers and writes the completed number.
- Does what they have written, match your number?
- Swap roles and repeat!
- Use a different coloured pencil to shade numbers on the place value grid. Numbers already shaded cannot be re-used.

Challenge

Big numbers in one (1000) or odd two columns to make numbers with three decimal places which add to 0.9999.

1000s	100s	10s	0.001s

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

Learning Reminders

Calculate time intervals in hours and minutes.

A film starts at
2 o'clock.

If it finishes at **3:45**, how
long is the film?

You can count around hours
and minutes on an analogue
clock or calculate how many
hours and minutes have
been added to the digital
time. **1 hour 45 mins**



Learning Reminders

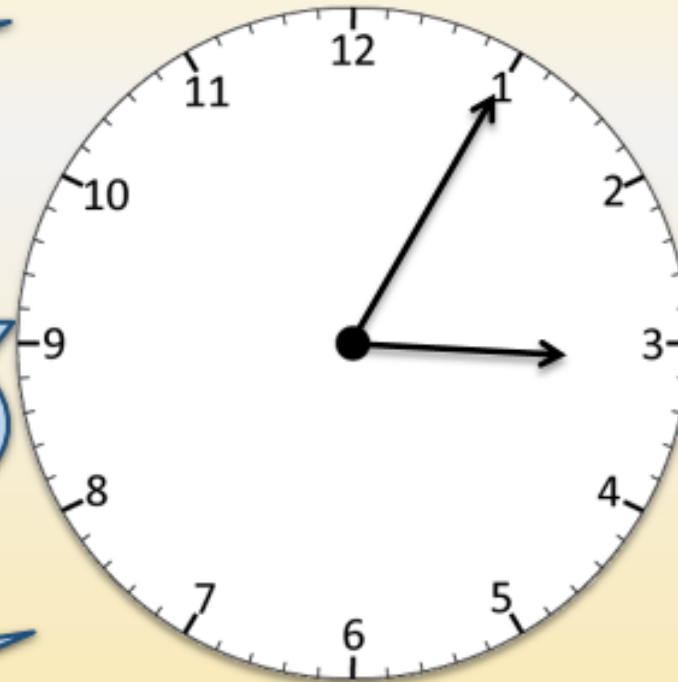
Calculate time intervals.

A programme starts at
5 past 3.



If it finishes at **5 to 4,**
how long does it last?
Is it more or less than
1 hour?

Use an analogue clock
to check...
50 minutes



Learning Reminders

Calculate time intervals in hours and minutes.

A lesson starts at
10 past 9.



If it finishes at $\frac{1}{4}$ past 10,
how long does it last? Is it
more or less than one hour?

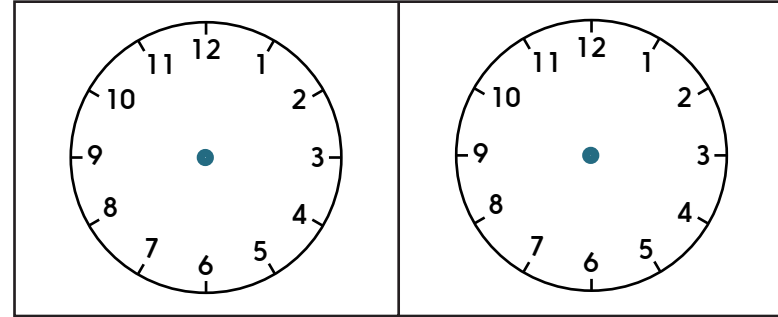
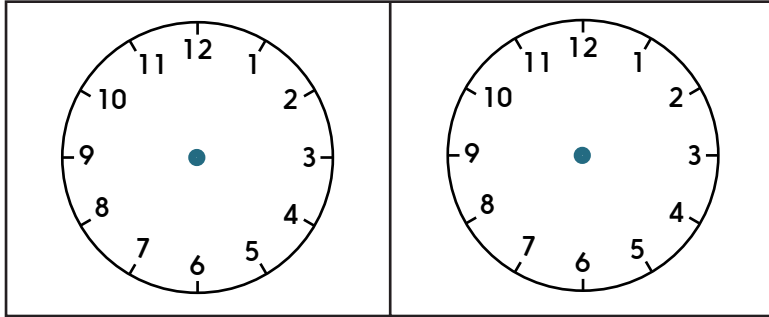
Use your analogue
clock to find out.
1 hour 5 minutes



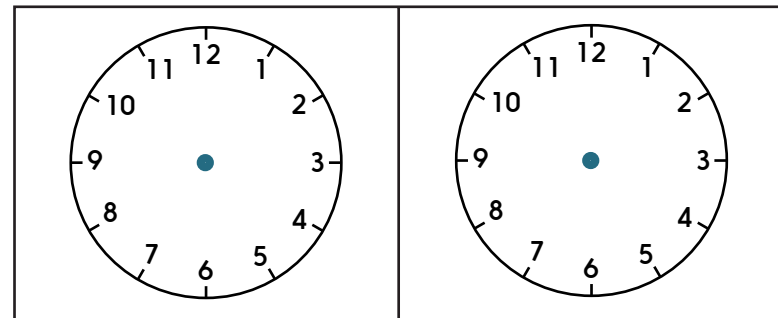
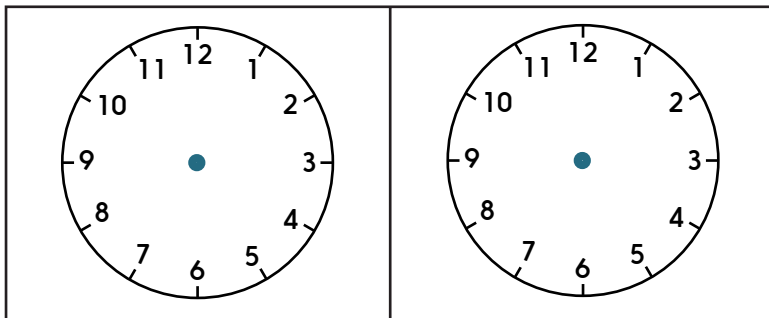
Practice Sheet Mild

Time intervals

On the clocks show two pairs of times that are 10 minutes apart, and write the digital times underneath.



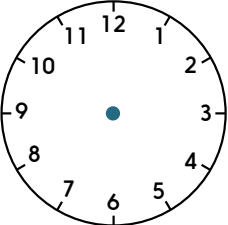
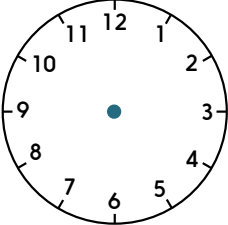
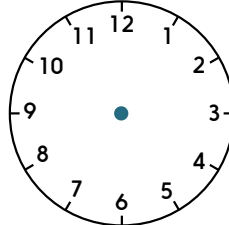
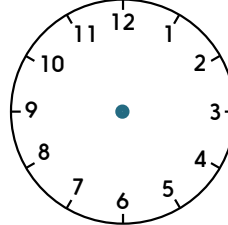
On the clocks show two pairs of times that are 15 minutes apart, and write the digital times underneath.



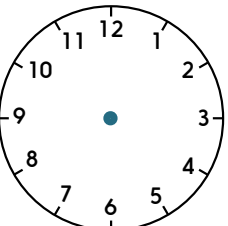
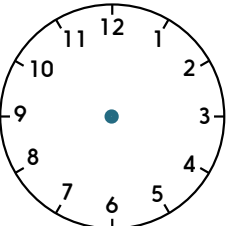
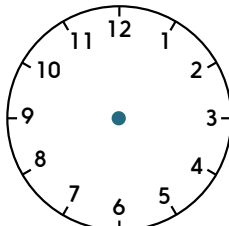
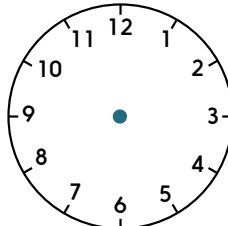
Practice Sheet Mild

Time intervals

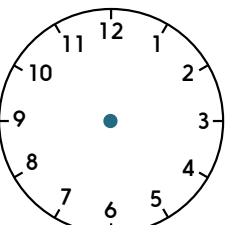
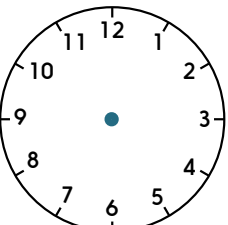
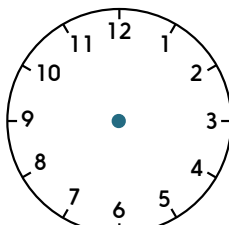
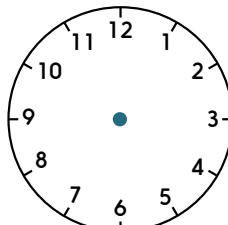
On the clocks show two pairs of times that are 20 minutes apart, and write the digital times underneath.

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

On the clocks show two pairs of times that are 30 minutes apart, and write the digital times underneath.

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

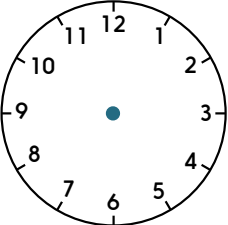
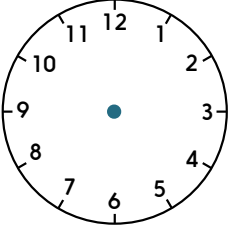
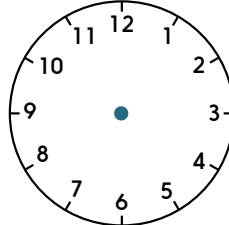
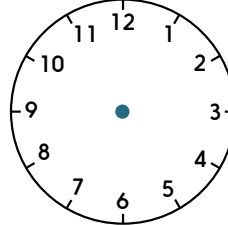
On the clocks show two pairs of times that are 45 minutes apart, and write the digital times underneath.

			
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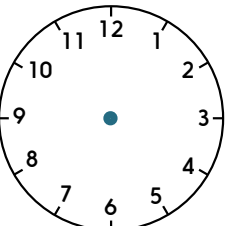
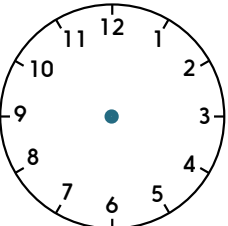
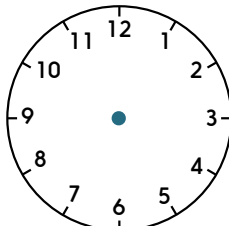
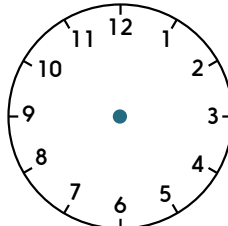
Practice Sheet Hot

Time intervals

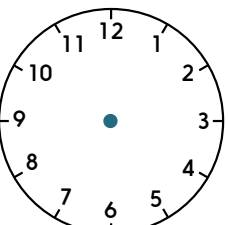
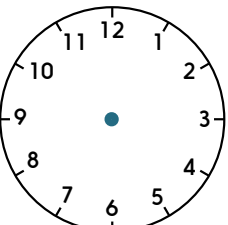
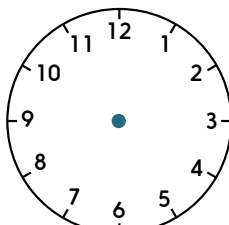
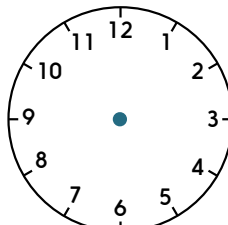
On the clocks show two pairs of times that are 20 minutes apart, and write the digital times underneath.

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

On the clocks show two pairs of times that are 30 minutes apart, and write the digital times underneath.

			
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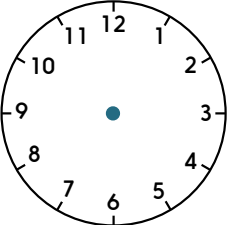
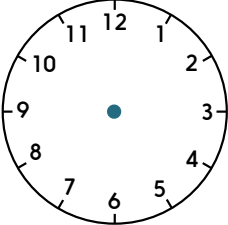
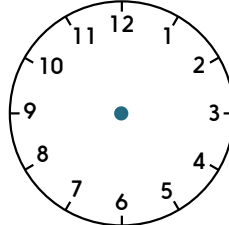
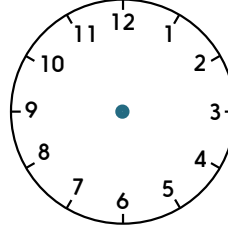
On the clocks show two pairs of times that are 45 minutes apart, and write the digital times underneath.

			
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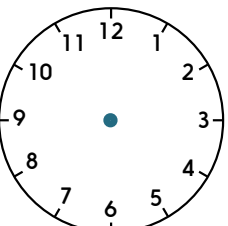
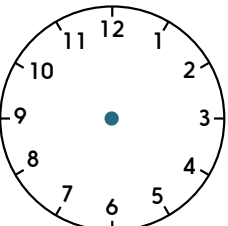
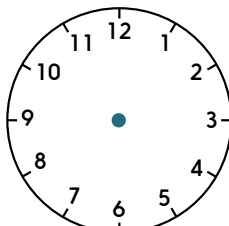
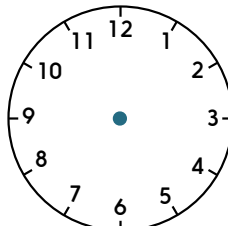
Practice Sheet Hot

Time intervals

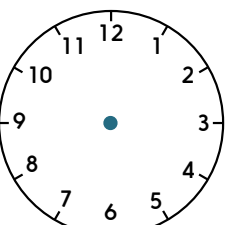
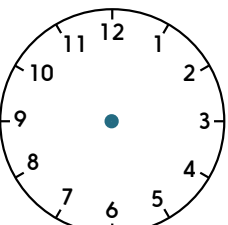
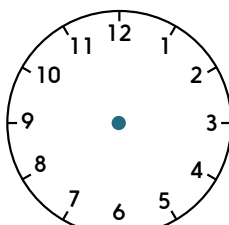
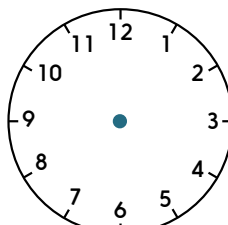
On the clocks show two pairs of times that are 45 minutes apart, and write the digital times underneath.

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

On the clocks show two pairs of times that are 1 hour and 15 minutes apart, and write the digital times underneath.

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

On the clocks show two pairs of times that are 25 minutes apart, and write the digital times underneath.

			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Practice Sheets Answers

Time intervals (mild)

Sheet 1

Children draw pairs of time that are 10 and 15 minutes apart on analogue clocks and write the corresponding digital times. Note that positioning of the hands on the analogue clocks is correct.

Sheet 2

Children draw pairs of time that are 20, 30 and 45 minutes apart on analogue clocks and write the corresponding digital times. Note that positioning of the hands on the analogue clocks is correct.

Time intervals (hot)

Sheet 1

Children draw pairs of time that are 20, 30 and 45 minutes apart on analogue clocks and write the corresponding digital times. Note that positioning of the hands on the analogue clocks is correct.

Sheet 2

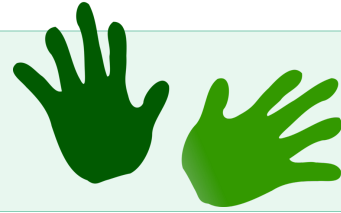
Children draw pairs of time that are 45, 1 hour 15 minutes and 25 minutes apart on analogue clocks and write the corresponding digital times. Note that positioning of the hands on the analogue clocks is correct.

A Bit Stuck? Match the times

Work in pairs

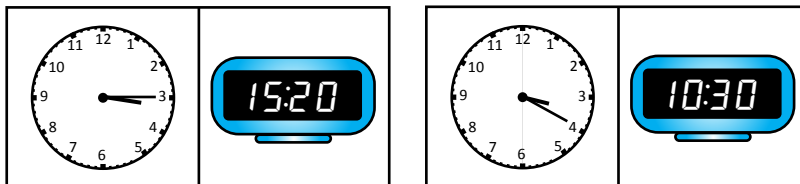
Things you will need:

- A set of dominoes (past and to the hour)



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?

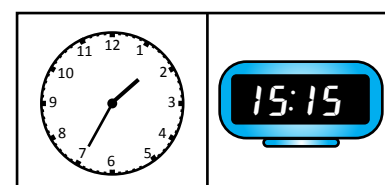
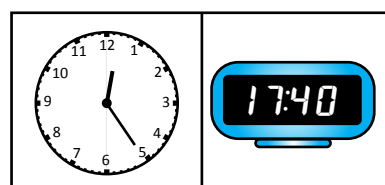
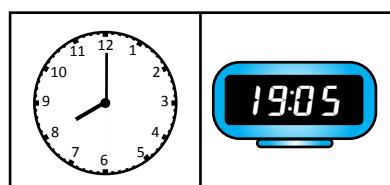
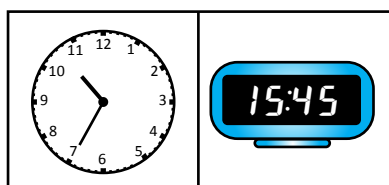
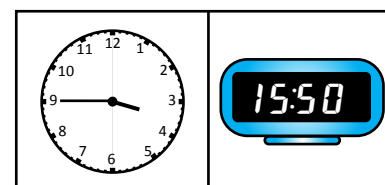
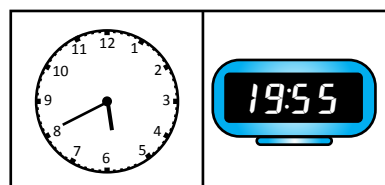
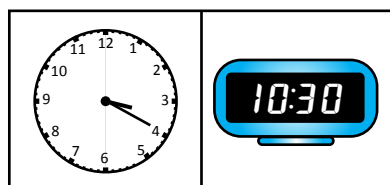
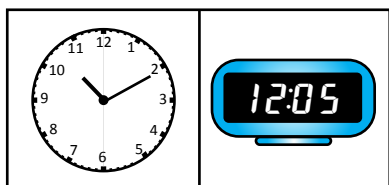
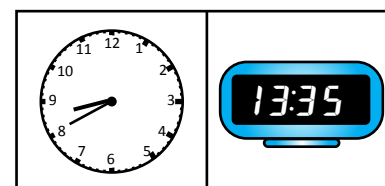
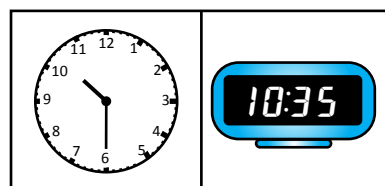
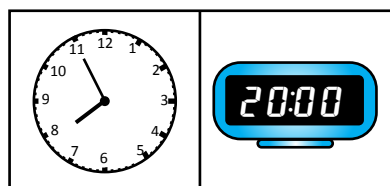
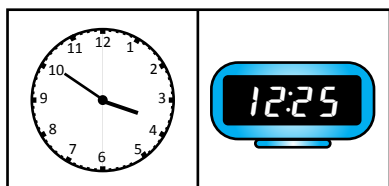
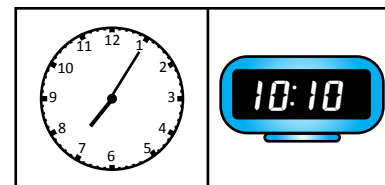
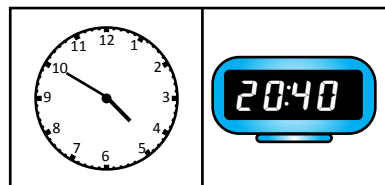
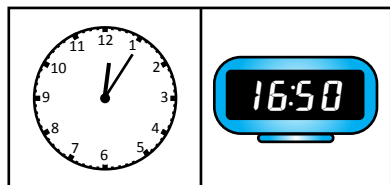
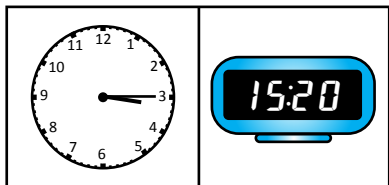
S-t-r-e-t-c-h:

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

Start and finish times

Alice drew a picture. She started before 11 o'clock and finished after 11 o'clock. It took her 5 minutes to draw her picture.

When could she have started and finished?

Are there other pairs of possible times?

How many pairs of times altogether?

Ben drew a picture. He started before 11 o'clock and finished after 11 o'clock. It took him 10 minutes to draw his picture.

When could he have started and finished?

Are there other pairs of possible times?

How many pairs of times altogether?

Carla drew a picture. She started before 11 o'clock and finished after 11 o'clock. It took her 15 minutes to draw her picture.

When could she have started and finished?

Are there other pairs of possible times?

How many pairs of times altogether?

Dev drew a picture. He started before 11 o'clock and finished after 11 o'clock. It took him 20 minutes to draw his picture.

Looking at your answers for Alice, Ben and Carla, how many possible pairs of start and finish times do you think there are?

Can you explain your ideas?