

**Diving into Mastery**



# Finding the Duration

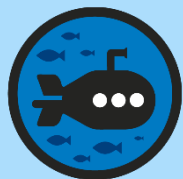
twinkl

# Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



**Diving**



**Deeper**



**Deepest**

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.



# Aim

- Compare durations of events [for example to calculate the time taken by particular events or tasks].



## Finding the Duration

## Diving



What is the duration of maths?

| Lesson         | Start Time | Finish Time | Duration |
|----------------|------------|-------------|----------|
| Maths          | 09:00      | 10:00       |          |
| Break          | 10:00      | 10:15       |          |
| English        | 10:15      | 11:10       |          |
| Guided Reading | 11:10      | 11:50       |          |

one hour

forty minutes

fifteen minutes

fifty-five minutes

## Finding the Duration

## Diving



What is the duration of break?

| Lesson         | Start Time | Finish Time | Duration |
|----------------|------------|-------------|----------|
| Maths          | 09:00      | 10:00       | one hour |
| Break          | 10:00      | 10:15       |          |
| English        | 10:15      | 11:10       |          |
| Guided Reading | 11:10      | 11:50       |          |

forty minutes

fifteen minutes

fifty-five minutes

## Finding the Duration

### Diving



What is the duration of guided reading?

| Lesson         | Start Time | Finish Time | Duration        |
|----------------|------------|-------------|-----------------|
| Maths          | 09:00      | 10:00       | one hour        |
| Break          | 10:00      | 10:15       | fifteen minutes |
| English        | 10:15      | 11:10       |                 |
| Guided Reading | 11:10      | 11:50       |                 |

forty minutes

fifty-five minutes



## Finding the Duration

## Diving



Which train has the shortest journey?

**Train one**

09.00 – 09.40

1

**Train two**

08.05 – 08.25

2

**Train three**

08.10 – 08.25

3

**Train four**

09.00 – 10.00

4

shortest

longest

## Finding the Duration

## Diving



Which train has the longest journey?

**Train one**

09.00 – 09.40

1

**Train two**

08.05 – 08.25

2

**Train four**

09.00 – 10.00

4

**Train three**

08.10 – 08.25

3

shortest

longest



## Finding the Duration

## Diving



Which remaining train has the shortest journey?

**Train one**

09.00 – 09.40

1

**Train two**

08.05 – 08.25

2

**Train three**

08.10 – 08.25

3

**Train four**

09.00 – 10.00

4

shortest

longest

## Finding the Duration

## Diving



**Train one**  
09.00 – 09.40

1

**Train three**  
08.10 – 08.25

3

**Train two**  
08.05 – 08.25

2

**Train four**  
09.00 – 10.00

4

shortest

longest

## Finding the Duration

## Diving



James played football for 45 minutes.  
Which duration shows when he played?

**08.00 – 09.00**

**08.05 – 08.55**

**10.15 – 11.00**

**10.20 – 11.50**





## Finding the Duration

## Deeper



Robert needs to be at school in fifty minutes.

Before he goes, he needs to:

- tidy his room for 10 minutes;
- get changed in 5 minutes;
- brush his hair and teeth in 5 minutes;
- have breakfast in 10 minutes;
- pack his school bag in 5 minutes.

If it takes Robert ten minutes to walk to school, will he be early or late if he sticks to his schedule?

## Finding the Duration

## Deeper



Will Robert be early or late if he sticks to his schedule?

**10 minutes + 5 minutes + 5 minutes + 10 minutes + 5 minutes**

tidy room

get  
changed

brush hair  
and teeth

have  
breakfast

pack bag

35 minutes + 10 minutes to walk to school = 45 minutes altogether

50 minutes – 45 minutes = 5 minutes

Robert will be 5 minutes  
early for school.

## Finding the Duration

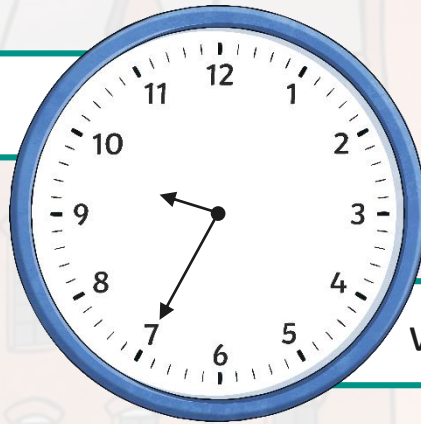
## Deeper



Amy arrived at a party 10 minutes after it started.

Ben arrived 5 minutes after Amy.

Christophe arrived at



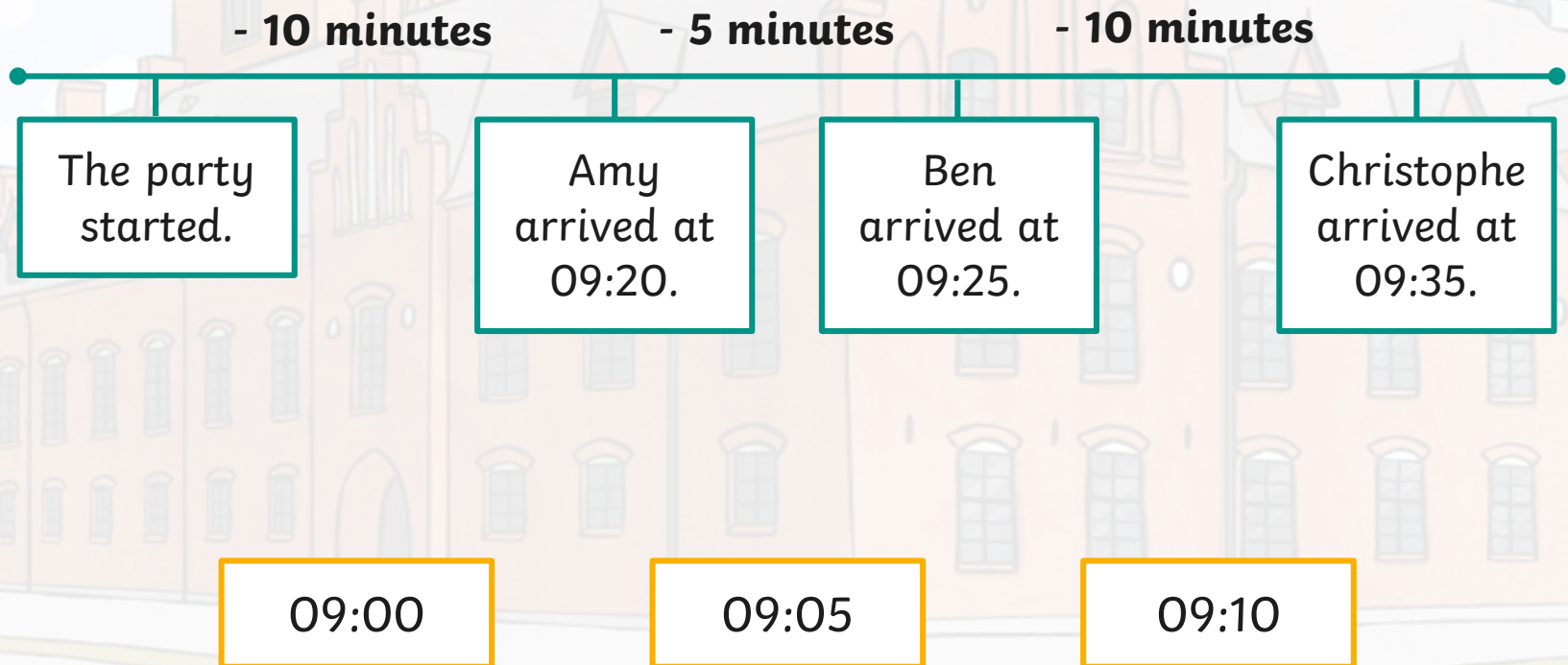
which was 10 minutes after Ben.

What time did that party start?



## Finding the Duration

## Deeper





Year 3 are discussing the amount of time that has passed between the times shown on these two clocks.



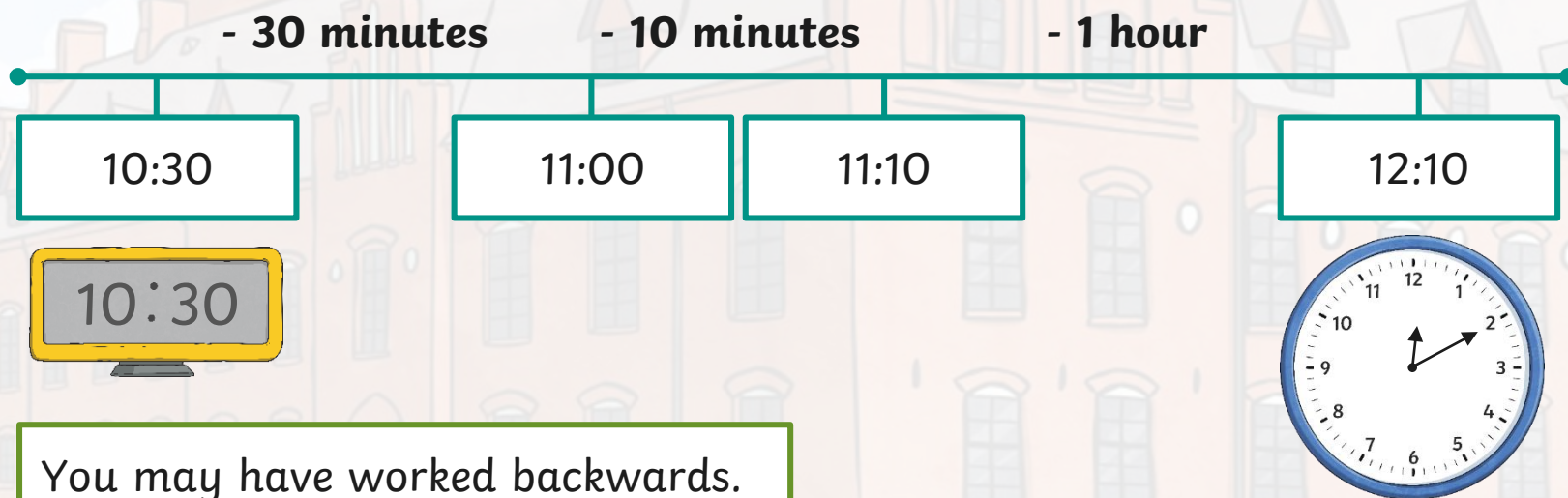
How many different methods can you think of to calculate how much time has passed? Investigate.

## Finding the Duration

## Deepest



There are many different ways. For example, you may have used a number line. Jumping 1 hour, then half an hour, then 10 minutes, shows the duration totals 1 hour 40 minutes.



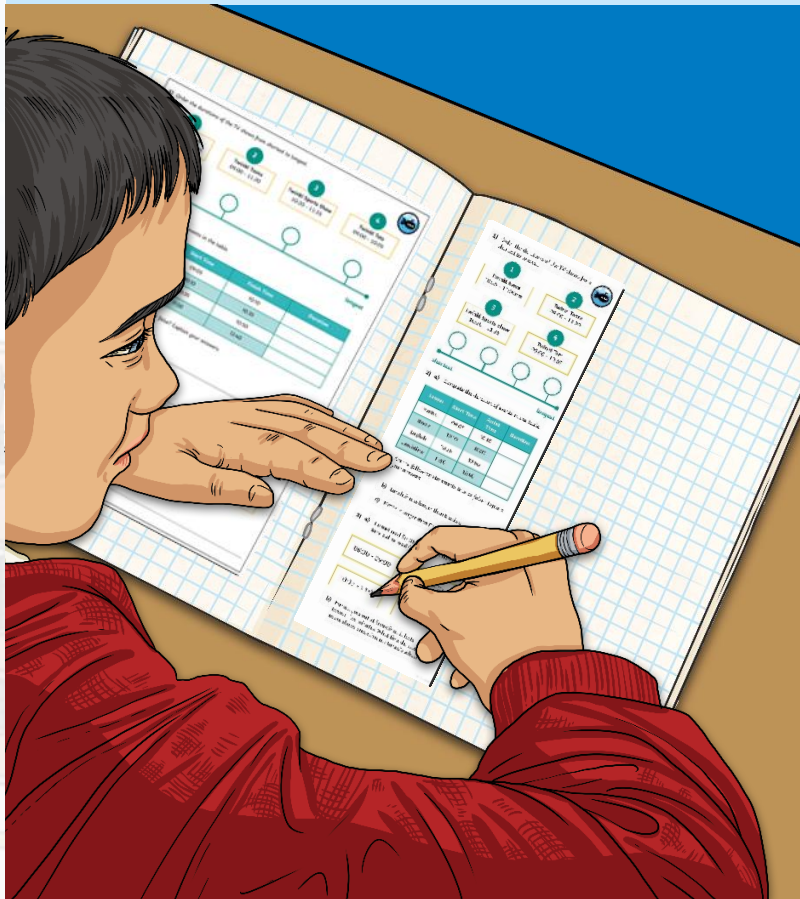
You may have worked backwards.

$$1 \text{ hour} + 10 \text{ minutes} + 40 \text{ minutes} = 1 \text{ hour } 40 \text{ minutes}$$



# Finding the Duration

Dive in by completing your own activity!



1) The time...

Before she...

She walks to school every day. It takes her 15 minutes. She starts school at 8:30. What time does she get to school?

a) Draw a timeline to show the duration of the events.

b) How long does it take her to get to school?

2) Two children...

How long does it take them to get to school?

10

1) Order the durations of the TV shows from shortest to longest.

1 Twinkl News 10:35 - 11:00am

2 Twinkl Toons 09:00 - 11:20

3 Twinkl Sports Show 10:20 - 11:35

4 Twinkl Tots 09:00 - 10:05

shortest longest

2) a) Complete the duration of events in the table.

| Lesson    | Start Time | Finish Time | Duration |
|-----------|------------|-------------|----------|
| Maths     | 09:05      | 10:10       |          |
| Break     | 10:10      | 10:35       |          |
| English   | 10:35      | 10:50       |          |
| Lunchtime | 11:50      | 12:40       |          |

Are the following statements true or false? Explain your answers.

b) Lunchtime is longer than English.

c) Maths is longer than English.

3) a) Hamed read for 35 minutes. Circle when he read.

08:30 - 09:00    08:20 - 08:55    10:35 - 11:00    10:20 - 10:50

b) Hamed goes out at breaktime. It lasts twenty-five minutes. What time duration above shows breaktime at Hamed's school?

