

# Clocks: time differences

## Strand

Measuring

## Learning objective

Read time to the nearest minute; calculate time intervals from clocks

## Type of starter

Read

### Whiteboard tools

- Press the 'randomise' button to select a random digital or analogue time on the clocks.
- Drag the clock hands manually to move the time on the analogue clock; set the hour and minutes on the digital clock by pressing the + and – signs.
- Use the 'options' button to specify the settings for the 'randomise' functions. You can also choose to link the hour and minutes hands on the analogue clock.
- Set the digital clock to '12 hour' mode.

### What to do

The aim of this activity is to work out, in hours and minutes, the difference between the two clocks. Start by pressing the 'randomise' button under the analogue clock and ask the class to call out the time. Repeat three or four times to assess that the children are able to read the time to the nearest minute with confidence. Next, press the 'randomise' button on both the analogue and digital clocks and ask the children to work out the time difference between the two. To adapt the game you might either change both or just one clock face.

### Differentiation

**Less confident:** if children find it challenging to read minute divisions on the clock, adjust the time by dragging the minute hand to the nearest whole five-minute interval (the hour hand will adjust accordingly if you select 'link hands' in 'options').

**More confident:** ask the children to assume that the analogue clock represents a.m. and the digital clock represents p.m. Can they tell you what the time difference would be?

### Key questions:

- How can we make rough estimates between the times?
- What is the difference between a.m. and p.m. (a.m. antemeridian, p.m. post meridian), and why does it matter?

**time set (analogue)**  
Drag hands to change time

**time set (digital)**  
Press + or – buttons to set time

**'randomise'**  
Set a random time

**'options'**

- Select setting for 'randomise' function
- Link hands on analogue clock