

Simple elapsed time: how long has passed

CURRICULUM ALIGNMENT

MEA.TIM.3a

compare, approximate and measure time using appropriate units of measurement.

MEA.TIM.3b

identify the relationship between different units and representations of time.

INTERACTIVES

Analog Clock Builder · display, explore

Word Problem · challenge

WHAT THIS LESSON TEACHES

The amount of time that has gone by between a start time and a finish time. Count on from the start hand to the finish hand to see how long has passed.

→ From 2 o'clock to 3 o'clock, 1 hour has passed.

→ From 10 o'clock to quarter past 10, 15 minutes have passed.

MODEL THIS ON THE BOARD

HOW LONG FROM 2 O'CLOCK TO QUARTER PAST 2

- 1 Look at the start time of 2 o'clock with the hour hand on 2 and minute hand on 12.
- 2 Count on to the finish at quarter past 2, where the minute hand reaches the 3.
- 3 The minute hand has moved a quarter of the way round, so 15 minutes have passed.

LESSON ARC

Open with two clock faces on the IWB — 2 o'clock and 3 o'clock — and gather the forward-stepping idea in pupils' own words. Model three pairs live, pivoting on 'how far has the minute hand moved?' rather than adding single minutes. Pupils try four pairs at the board, then write three 'start → finish → time passed' lines in their copies. Class Challenge frames four school-day activities all inside one hour. The answer is always the elapsed time, never a clock time.

TEACHING MOVES

1. **Getting Started.** Have both clock faces (2 o'clock, 3 o'clock) up before pupils settle. Take three hands-up answers, no open call-outs. Listen out for 'you go forward one hour' — that forward-stepping phrase is the whole lesson, so re-voice it back to the class.
2. **Watch and Notice.** Work each pair on the clock interactive live. Before you confirm any duration, ask 'has the hour hand moved a whole number or half a number?' and hold out for the class to predict. On the half-past example, trace the minute hand's half-swing with your finger so the 30 minutes is something they see, not something you tell them.
3. **Try It Together.** Set each start hand yourself, then a pupil moves the finish hands and reads the elapsed time off the clock. On '12 o'clock → half past 12', ask 'did the minute hand go all the way round, or only part way?' — this is where pupils name the wrong finish hour when the minute hand sits on the 6.
4. **Write the Times in Your Copy.** Glance along the arrow lines as you circulate — you're watching for anyone writing a clock time in the 'time passed' box rather than a duration. Prompt them at the desk; no marking.
5. **Class Challenge.** Brisk board turns — a pupil sets and reads each activity, the class confirms, move on. Don't re-explain each one; they've already met this. The only thing to catch is a pupil answering 'half past 12' instead of '30 minutes' — nudge with 'that's the finish, but how long lasted?'

6. What Did We Notice?. Ask how you know the minutes just by looking at the minute hand. Re-voice a strong answer: 'so we don't add up single minutes — we read how far the hand has moved.' Head off any pupil giving a clock time as the answer.

COMMON MISCONCEPTIONS

⚠ A pupil answers '12 o'clock → half past 12' with 'half past 12' — they give the finish time instead of the duration that passed.

Point at the two clocks and ask 'that's where the hand finished — but how LONG did it take to get there?' Trace the minute hand's swing from 12 round to the 6 so the 30 minutes is a distance travelled, not a position.

⚠ When the minute hand lands on the 6, a pupil reads the finish as the next hour — 'half past 12' becomes '1 o'clock'.

On the clock interactive, freeze the hour hand between the 12 and the 1 and ask 'has it reached the 1 yet?' Show it's only halfway across, so it's still half past 12, not 1 o'clock.

⚠ A pupil tries to count single minutes round the face (1, 2, 3...) for a quarter past and loses count or arrives at the wrong total.

Stop them and re-set to reading the hand's position: a quarter turn IS 15 minutes, read straight off — no need to count in ones. Point to the quarter-round position on the interactive.

DIFFERENTIATION

EMERGING

- Keep this pupil on whole-hour jumps only (4 o'clock → 5 o'clock) while the class moves to half and quarter past — the 'one number forward is one hour' step is secure ground.
- Set the start hand on the interactive for them and let them move only the finish hand, saying the elapsed time aloud before writing it.

DEVELOPING

- After the copybook lines, ask them to work a finish time that lands on quarter TO (2 o'clock → quarter to 3) and explain why it's a longer jump than quarter past.
- Give a missing-piece line: 'start at 3 o'clock, 15 minutes passed — where's the finish hand?' so they run the rule backwards.

PROFICIENT

- Pose: 'a lesson started at 10 o'clock and lasted 45 minutes — what does the finish clock look like, and how do you know?' Let them reason it on the interactive and defend the answer to the class.

✓ **Cross-curricular:** Tie to the school day itself — pupils work out how long their real lunch or PE slot lasts from the classroom clock's start and finish times.

ANSWER KEY

Scaffold: visual check on the page

Q1: 1 hour

Q2: 30 minutes

Q3: 30 minutes

Q4: 45 minutes

Q5: 45 minutes

Q6: 1 hour

a) Always : This is the lesson key point for finding elapsed time.

b) Always : The hour hand moves from one number to the next in exactly 1 hour.

c) Sometimes : True from 2 o'clock to 5 o'clock; false from 2 o'clock to quarter past 2.

d) Never : Only 15 minutes have passed, which is less than 1 hour.