

Telling time to 5-minute intervals (analog)

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 · challenge, display)

WHAT THIS LESSON TEACHES

Each number on the clock face stands for five minutes on from the last. Start at the 12 and count the minute hand round in fives: 5, 10, 15, 20. Once it goes past the 6, we name the minutes still left until the next hour, so we say things like ten to seven.

→ Minute hand on the 4: $5 + 5 + 5 + 5 = 20$ minutes, so twenty past.

→ Minute hand on the 10: that is fifty past, but we name it as ten to the next hour.

MODEL THIS ON THE BOARD

TWENTY PAST THREE

- ① The hour hand is just past the **3**, so the hour is three.
- ② The minute hand points to the **4**. Count in fives from 12: 5, 10, 15, 20.
- ③ The hand is before the 6, so we say **twenty past** three.



DISCUSSION STARTER

REFLECT

Does counting in fives round the clock feel automatic yet, or do you still need to check?

LESSON ARC

Start at the real classroom clock, counting the marks from the 12 round in fives. Move to the analog-clock interactive and walk three named times aloud — quarter past three, half past eight, then the make-or-break bridge to 'ten to seven', swapping from counting up to counting what's left. Pupils set four times at the board, then draw three clock faces in their copy with the time in words underneath. The Class Challenge steps from clear 'past' times into the trickier 'to' times.

TEACHING MOVES

1. **Getting Started.** Point to the actual wall clock as pupils settle and count the marks from 12 to 3 aloud — five, ten, fifteen. Give five seconds of silent think-time, then take three hands-up answers only. Listen for who counts each mark versus who jumps in fives at the numbers, and revoice: 'the 6 is six fives, so thirty minutes.'
2. **Watch and Notice.** Walk each clock on the interactive one at a time so the class chorus-counts the minute hand in fives with you. The 'ten to seven' beat is make-or-break: count all the way to fifty past six,

then point to the hour hand sitting nearly on seven and show the swap — $60 - 50 = 10$ left. Slow right down and let pupils say both names aloud before you confirm 'ten to seven'.

3. **Try It Together.** One pupil drags both hands per time while the rest chorus-count the minute hand in fives and agree or correct out loud — this round is talking it through, not marking. Before each time, ask 'past or to, and which hour next?' Watch for the slip on 'twenty to four': pupils set the hour hand on the 4 instead of just before it. Revoice: 'if it's twenty to four, four hasn't happened yet, so the hour hand is just before it.'
4. **Draw the Clocks in Your Copy.** Pupils draw three blank faces and mark ten past four, twenty to nine, five to six, with the time in words underneath each. Walk the room glancing at the hour hand on the two 'to' times — it should sit just before the named hour, not on it.
5. **Class Challenge.** Keep the board work brisk — pupils take turns setting quarter past two, twenty past five, five to eleven, then twenty-five to eight, and the class checks each before moving on. The 'to' times run from easier (hand on the 11) to deeper (hand on the 7); before each one ask 'past or to, and which hour next?' Use the on-screen ✓ as part of your narration — 'yes, that's it.'
6. **What Did We Notice?.** Display-only discussion. Listen for pupils noticing the minute hand passes a whole number while the hour hand barely moves, and revoice a strong answer: 'the long hand counts the small minutes, the short hand counts the slow hours.' Head off the idea that both hands move at the same speed.

COMMON MISCONCEPTIONS

⚠ For 'twenty to four', pupils set the hour hand right on the 4 — they read the named hour as the one the hand should point to.

Stop and ask: 'has four o'clock happened yet?' On the interactive, drag the hour hand to just before the 4 and show it creeping toward it. Revoice: 'four hasn't come yet, so the hour hand is still climbing up to it.'

⚠ Pupils keep counting up for a 'to' time and call ten to seven 'fifty past six' — they never make the swap to counting what's left.

Build the bridge on the analog-clock interactive: count all the way to fifty, then point to the gap between the minute hand and the top. 'How many fives left until seven?' Show $60 - 50 = 10$ and let them name both before confirming 'ten to seven'.

⚠ Pupils count every little mark one at a time and lose their place, instead of jumping five at each number.

Anchor the count at the numbers: tap the 1 and say 'five', tap the 2 and say 'ten'. Have the class chorus only at each number so the jump-in-fives rhythm sticks.

DIFFERENTIATION

EMERGING

- Stay on 'past' times only (quarter past, half past) on the interactive while the class moves to 'to' times; these pupils draw just the two 'past' clocks in their copy.
- Write the five-times count round the rim of one blank paper clock face (5, 10, 15...) so pupils read the minutes off rather than holding the count in their head.

DEVELOPING

- After the copybook clocks, ask: 'five to six — how many minutes is that past five o'clock?' so pupils hold both the 'to' name and the count-up number at once.
- Give a missing-hour variant: 'the minute hand is on the 10 and it's ten to — what could the hour be?' and ask how they'd know which hour from the short hand.

PROFICIENT

- After the Class Challenge, narrate a harder variant from the front: 'it's twenty-five to eight now — where will the minute hand be in ten minutes, and what will we call that time?'
- Pose: 'explain to someone in a younger class why the minute hand jumps a whole number every five minutes but the hour hand barely moves' — let them rehearse it in their copy before the maths-talk.

✓ **Cross-curricular:** Link to the school day — pupils read the real classroom clock at small break and lunch and say the time as a 'past' or 'to' time.

ANSWER KEY

- a) minute hand on the 2:** 10 minutes past
- b) minute hand on the 3:** quarter past (15 min)
- c) minute hand on the 6:** half past (30 min)
- d) minute hand on the 8:** 20 minutes to
- e) minute hand on the 10:** 10 minutes to
- f) minute hand on the 11:** 5 minutes to

Q1: 10 minutes; ten past four

Q2: 15 minutes; quarter past two

Q3: 30 minutes; half past nine

Spot: Each number on the clock is worth 5 minutes, not 1. The minute hand on 4 means $4 \times 5 = 20$ minutes, so the time is 2:20.

EXTENSION SHEET · STRETCH ANSWERS

S1: 13:10

S2: 15:10

S3: 11:00

S4: 14:15

S5: 8:10