Lesson 2 NUMBER

Place value to 1,000 — the hundreds column

CURRICULUM ALIGNMENT

NUM.PVT.3 explore equivalent numerical expressions of numbers using the base ten system.

INTERACTIVES Place Value Blocks (Dienes) · challenge, display, explore

LESSON ARC

Open with the trade — ten ten-rods become one hundred-flat on the IWB, the same ten-times rule pupils already use for tens and units. Build 234, then dwell on 305 and 470 so the class can say what each zero is holding. Pupils sketch H-T-U columns in their copy and slot 162, 308, 450, 909 in. The Class Challenge builds 206, 540, 803, 707 at the board; the Student Activity Book page is the pencil-and-paper practice.

TEACHING MOVES

1. **Getting Started.** Give five seconds of quiet think-time on the finger question, then take three hands-up answers — not open call-outs. Put 234, 305, 470 up and ask 'what's the same, what's different?' Fish for 'they all have three digits' and 'two have a zero' — but don't explain the zero yet; that's the whole lesson.
2. **Watch and Notice.** On 305, stop and point at the empty tens column: 'what is holding that empty space?' before you reveal anything. On 470 move the zero to the units and stress the column doesn't vanish — it just holds nothing. Don't leave this step until the class can say aloud what the zero is doing in both.
3. **Try It Together.** Call a number under 1,000, one pupil builds it on the mat, the class reads it back in unison and confirms. Deliberately slot in 206 (zero in tens) and 340 (zero in units). Revoice a strong answer: 'so the zero keeps the tens empty, and that keeps the 2 in the hundreds.'
4. **Sketch the Columns in Your Copy.** Walk the room glancing at column labels and digit alignment — no marking. Watch specifically that the zero in 308 and 450 lands in its column rather than being dropped or left as a gap.
5. **Class Challenge.** Brisk practice — for each of 206, 540, 803, 707 the class predicts the columns out loud, then a pupil builds and presses Check, and you confirm with a quick 'yes — that's it.' Keep it moving; this round is consolidation, not re-teaching. Ask 'what's tricky about the zero here?' as each one lands.
6. **What Did We Notice?.** Put 305 and 350 side by side — same three digits, very different numbers. Listen for pupils naming position, not digit size, as the decider. Revoice: 'the 3 is worth three hundred in 305 because it sits in the hundreds column — the column does the deciding.'

COMMON MISCONCEPTIONS

⚠ Pupils read 305 as 'thirty-five' or write it as '35' — they drop the zero because 'there's nothing in the tens'.

Build 305 and 35 side by side with place-value blocks. Point to the empty tens column in 305: take the zero away and the 3 slides into the tens — now it's a different number. The zero is doing a job: it holds the 3 in the hundreds.

⚠ When asked which digit decides the value, a pupil says 'the biggest digit' — so they'd call the 5 in 305 the most important.

This is exactly the maths-talk prompt — settle it with 305 vs 350 on the blocks. Same digits, different positions, different numbers. Have the pupil read each 3 by its column: 'three hundred' here, 'thirty' there. Position decides, not size.

DIFFERENTIATION

EMERGING

- Pre-label the H, T, U columns on the IWB mat so these pupils place digits into a ready-made structure rather than building the columns themselves.
- In the copybook sketch, stay with 162 and 909 (no place-holder zero) before attempting 308 and 450 with teacher support.

DEVELOPING

- After the copybook page, ask: which of 308 and 380 is bigger, and how does the position of the zero tell you?
- Pose a missing-digit number — 2_6 read as 'two hundred and six' — and ask which digit goes in the gap and why.

PROFICIENT

- While the class works the Class Challenge bank, narrate a harder variant from the front: 'make the largest three-digit number using a 7, a 0 and a 4 — where does the zero have to go, and why can't it go first?' Have these pupils justify aloud before the class reads it back.

↗ **Cross-curricular:** Tie to Geography — read three-digit heights of Irish mountains (Carrauntoohil's 1,038 m won't fit, but Mangerton at 838 m does) and place each digit in its column.

ANSWER KEY

a) Each digit sits in its own column; line them up on the right.

b) A digit's value = the digit × its column.

c) Largest: biggest digit on the left; smallest: smallest non-zero digit on the left.

Q1: 4,000 (4 thousands)

Q2: 249, 565, 570

Q3: 2486, 2963, 7553, 7628

Q4: 3,772 = 3,000 + 700 + 70 + 2

EXTENSION SHEET · STRETCH ANSWERS

S1: 2 (2 ones)

S2: 299, 695, 967