

Reading and writing 3-digit numbers

CURRICULUM ALIGNMENT

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

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

LESSON ARC

Open with 216 shown two ways — digits and words side by side — and ask which digit gets written first. Build 143, 260, 408 with the place-value-blocks interactive, pausing hard on the silent zeros. Pupils take turns placing spoken numbers on the number line and writing the digits, then write four digit-and-word pairs in their copybook. The Class Challenge bank drills the zero-traps; the maths-talk wrap nails 'no word for a column means a zero holds it.'

TEACHING MOVES

- Getting Started.** Give five seconds of quiet think-time before any hands. Take three hands-up answers, not call-outs. You're listening for 'hundreds first because it's the biggest part' — link it to 'hundred' being the first word we say.
- Watch and Notice.** Build each number on the place-value-blocks interactive and point to each column as you say its word. Linger on 408: say 'four hundred AND eight' and ask the class what stops it being read as 'forty-eight' — the tens zero is the make-or-break here.
- Try It Together.** Say each number, let a pupil place it on the number line and write the digits, then the class agrees or corrects aloud. Watch 'three hundred and four' — if a pupil writes 34 or 340, revoice: 'no tens, so a zero holds the tens place, then four units — 304.'
- Write the Pairs in Your Copy.** Walk the room glancing at whether the silent zeros in 260, 408 and 700 made it into the digit form. Don't correct individuals — jot the common slips and revoice them to the whole class once everyone's finished.
- Class Challenge.** Keep it brisk. For each number a pupil says it aloud, writes the digit form, then places it; the class confirms before moving on. Pause only on the zero-traps — 205, 803 and the double-zero 600 — narrating the tick: 'yes, eight hundred and three, that zero holds the tens.'
- What Did We Notice?.** Steer pupils to name that word order matches column order. Revoice the headline idea: 'when we don't say a word for a column, that column gets a zero — but we still write it.'

COMMON MISCONCEPTIONS

⚠️ Asked for 'three hundred and four', a pupil writes 34 — they drop the silent tens-zero and squash the digits together.

Build 304 on the place-value-blocks interactive next to 34. Same '3' and '4', wildly different amounts. Point at the empty tens column: 'nothing here, so a zero sits in to keep the 3 in the hundreds.'

⚠️ A pupil reads 408 as 'forty-eight' or writes 'forty-eight' as 408 — they ignore the hundreds digit and slide the tens and units together.

Cover the hundreds block on the interactive so only the 8 units show — that's 'eight'. Reveal the four hundred blocks. 'Four hundred AND eight — the tens zero is the gap that keeps them apart.'

DIFFERENTIATION

EMERGING

- Keep these pupils on numbers with no silent zeros first (143, 256) while the class tackles the zero-traps; bring in 260 only once the no-zero pattern is secure.
- Pre-draw the three labelled columns (H T U) in their copybook so they place digits into a ready structure rather than spacing the figures themselves.

DEVELOPING

- After the copybook page, give a four-digit number in words ('one thousand, two hundred and six') and ask whether the same word-order-matches-column rule still holds.
- Pose a missing-digit puzzle: 'I wrote a three-digit number with exactly one zero and it reads six hundred and ____ — what could it be?'

PROFICIENT

- Challenge: write every three-digit number that uses the digits 3, 0 and 7 once each, then read each one aloud. Which arrangements need 'and' and which hide a silent zero? Record the thinking in the copybook.

➤ **Cross-curricular:** Tie to Geography — read the populations of small Irish towns from a table (e.g. a town of 408) aloud and write each in words.

ANSWER KEY

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

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

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

Q1: 4,000 (4 thousands)

Q2: 299, 695, 967

Q3: $3,772 = 3,000 + 700 + 70 + 2$

Q4: 2486, 2963, 7553, 7628

EXTENSION SHEET · STRETCH ANSWERS

S1: 249, 565, 570

S2: 2 (2 ones)