

Reading and writing 4-digit numbers – digits to words and back

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

Write 3,650 on the IWB and draw out that we say the biggest chunk — thousands — first. Build 2,134, then 5,008 with the place-value-blocks interactive, pausing on 5,008 so pupils see the empty hundreds and tens columns make us skip those words. Pupils take turns building dictated numbers at the board, then write four numbers as digits and two as words in their copy. The Class Challenge drills zero-heavy numbers as a whole class.

TEACHING MOVES

- Getting Started.** Write 3,650 and hold five seconds of silent think-time before any hands. Listen for whether pupils say 'three thousand' first — then revoice: 'so we start with the biggest chunk and work down.'
- Watch and Notice.** Build each number on the place-value-blocks interactive, pointing to each column as you say its chunk. Stop dead on 5,008 and ask 'why don't we say a hundreds word?' — make the two zeros the whole point of the lesson, not a footnote.
- Try It Together.** Read a number slowly in words and send one pupil up to build it in the Th-H-T-U columns; rotate four pupils. After each build ask 'which chunk did you NOT hear, and what does that tell us?' and have the whole class read it back in unison.
- Write the Numbers in Your Copy.** Dictate four numbers for pupils to write as digits, slipping in one with an empty middle column like 3,605. Walk the room watching where zeros land — this is practice, not marking, so glance and move on.
- Class Challenge.** Run 1,205 → 3,090 → 7,016 → 9,400 briskly — one pupil up per number, class checks aloud, confirm with the Check button, move on. For each ask only 'which words tell you a column is empty?' rather than re-explaining the rule.
- What Did We Notice?.** Listen for a pupil naming the missing word as the empty-column signal and revoice it: 'so when a chunk is skipped, that's the zero telling us the column is empty.' Push gently that the thousands chunk always comes first.

COMMON MISCONCEPTIONS

⚠ Pupils write 5,008 as 5,8 or 58 — they hear 'five thousand and eight' and drop the empty hundreds and tens instead of holding their place with zeros.

Rebuild 5,008 on the place-value-blocks interactive with the empty hundreds and tens columns sitting visibly empty on screen. 'Nothing in this column — but the column is still there, so we write a zero to hold it.'

⚠ Pupils say 3,090 as 'three thousand and ninety' but then write 3,90 or 390 — they don't connect the missing 'hundred' word to a zero in the hundreds column.

Ask 'which chunk did you NOT hear?' Re-voice: no hundred word means a zero in the hundreds column. Have them build it in the Th-H-T-U columns and read it back before writing digits.

DIFFERENTIATION

EMERGING

- Keep this group on numbers with no empty columns at first (like 2,134) so they lock in the chunking order before zeros are added.
- Have them build each dictated number on the place-value-blocks interactive before writing digits, so the empty column is something they can see, not just hear.

DEVELOPING

- After the copy task, dictate a number with two non-adjacent zeros, such as 4,090, and ask which two chunks they didn't hear.
- Ask them to write 7,105 in words and then explain in one sentence why there's no tens word.

PROFICIENT

- Pose: 'I read a four-digit number and you heard no hundred word and no ten word — give me two different numbers that fit, and explain how you know.' Let them work it in the copy before sharing.
- Pull fast finishers ahead into the Student Activity Book page while the class finishes the Class Challenge.

➤ **Cross-curricular:** Tie to Geography — read the populations of Irish towns (e.g. Athlone, around 21,349) and have pupils say the four-digit parts aloud in chunks.

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: 2 (2 ones)

Q2: 4,000 (4 thousands)

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

Q4: €1.75 (write both as cent: 130 cent vs 175 cent)