

The hundred square: our number map

CURRICULUM ALIGNMENT

NUM.PVT.2a

understand that digits have different values depending on their place or position in a number.

INTERACTIVES [Hundred Square · challenge, display, explore](#)

WHAT THIS LESSON TEACHES

The hundred square is a grid of the numbers from 1 to 100 lined up in rows of ten, so every number has its own place. The tens digit tells you the row and the ones digit tells how far along that row.

- 24 sits in the twenties row, four squares along.
- For 37, go to the thirties row, then count along to 7.

MODEL THIS ON THE BOARD

TREASURE AT THE END OF A ROW

- 1 The treasure is hidden at the very end of the twenties row.
- 2 The twenties row holds **21** to **30**.
- 3 The last square of that row is **30**.
- 4 Dig for the treasure on **30**.

LESSON ARC

Open with a paper hundred square pinned like a treasure map: dig at the end of the twenties row, and hold the reveal until a pupil names 30. Walk four shaded numbers on the interactive — 24, 37, 60, 89 — always row first, then along, pausing hard on 60. Pupils shade called numbers together, write the forties row 41–50 in copybooks with 50 at the end, then Class Challenge runs 16 → 42 → 75 → 98. Maths-talk seals the square as a map.

TEACHING MOVES

1. **Getting Started.** Pin the paper hundred square before pupils settle. Take three hands-up guesses for ‘end of the twenties row’ before anyone points at the grid. Hold the reveal until a pupil names 30 — not 20, not 29.
2. **Watch and Notice.** On the hundred-square interactive, work 24 then 37 with the same route every time: ask which row before anyone counts from 1. At 60, freeze and let the class decide fifties or sixties before you settle it — last square of the fifties, not the start of the sixties. Finish on 89; revoice any pupil who leads with the ones.
3. **Try It Together.** Call 12, 28, 45, then 70. Before the pupil at the board taps, the class must name the row out loud. Catch anyone scanning from 1. Rotate four pupils; the class agrees or corrects together — nothing marked yet.
4. **Write the forties row.** Pupils write 41 to 50 in a single copybook line. Walk the room glancing for a full run and for 50 sitting at the very end — not dropped, not shoved onto a new line as if it started a new row. Whole-class practice, not marking.

5. **Class Challenge.** Keep the board work brisk: 16 → 42 → 75 → 98. Hold one beat before each shade for the class to name the row (teens, forties, seventies, nineties). Check each answer as you go; do not re-teach the route unless someone starts from 1.
6. **What Did We Notice?.** Ask how the square helps find any number fast. Listen for tens-first-then-along. Revoice: 'so the square is a map — row first, then along.' Head off anyone still wanting to count from 1 every time.

COMMON MISCONCEPTIONS

- ⚠ Pupils start at 1 and count square by square to the target instead of jumping to the tens row. Stop the board work. Cover the top of the square and ask only 'which row?' for 45 before uncovering. Revoice: tens digit picks the row; then we count along.
- ⚠ Pupils place 30, 60 or 90 at the start of the next row — '60 is the first sixties number'. Point at the end square of the fifties row and the first square of the sixties side by side. '60 finishes the fifties; 61 opens the sixties.' Have the class say end-of-row numbers in unison: 10, 20, 30...
- ⚠ For a teens number like 16, pupils hunt a 'ones row' or drift into the twenties. Name the teens row out loud before the tap. 'Sixteen lives with the other teens — one ten, then six along.' Shade 10–19 as a strip once so the row is visible.

DIFFERENTIATION

EMERGING

- Call only numbers under 40 and pre-name the row yourself ('twenties row — now find how far along') so the pupil only counts the ones.
- On the forties copybook line, supply 41 _ _ _ ... and let them fill the missing numbers through to 50.

DEVELOPING

- After a correct shade, ask the neighbour one before and one after on the same row — still row-first, no counting from 1.
- Slip in an end-of-row call (40, 70, 90) between ordinary ones and demand the row name before the tap.

PROFICIENT

- Narrate a stretch at the board: 'I'm thinking of a number in the seventies, five along — name it before we shade.'
- Fast finishers start the Student Activity Book page while the class finishes the last Class Challenge shade.

✂ **Cross-curricular:** Link to geography map skills — a grid reference is the same habit: find the row first, then move along.

ANSWER KEY

Scaffold: visual check on the page

Q1: 80

Q2: twenties row, 4 along

Q3: fifties row, at the end

a) Always : The twenties row runs from 20 to 30 so 30 is always at its end.

b) Always : On the hundred square the tens digit always names the row.

c) Never : The ones digit only tells how far along; the tens digit names the row.

d) Never : 37 is seven squares along, matching its ones digit.

EXTENSION SHEET · STRETCH ANSWERS

S1: 2 tens and 9 units

S2: 5 tens and 0 units

S3: 2 tens and 8 units

S4: 2 tens and 1 units