

Tens and units: module review on the 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

A two-digit number is built from tens and units. On the number map the tens show which row to find, then the units show how many places to count along that row.

→ 6 tens and 3 units is 63.

→ 4 tens and 7 units is 47.

MODEL THIS ON THE BOARD

RIDDLE: 7 TENS AND 2 UNITS

- 1 Look for the row that starts with **7** tens (the seventies row).
- 2 Count **2** places along that row.
- 3 The number you land on is **72**.

LESSON ARC

Open with two tens-and-units riddles — 6 tens and 3 units, then 3 tens and 6 units — swapping digit cards so the class sees the number change. On the hundred-square interactive walk 63, then 73 (ten more, straight down), then 36 (same digits swapped). Pupils shade riddle numbers together at the board, write 72 and 27 in copybook one under the other, then lock four Class Challenge riddles with brisk checks. Maths-talk returns to 63 versus 36: same digits, different worth.

TEACHING MOVES

1. **Getting Started.** Give five seconds of quiet think-time before any hands. Take two or three answers for each riddle. If both land as 63, hold digit cards 6 and 3 and swap them so the class can see the number change.
2. **Watch and Notice.** On the hundred-square interactive, find the row first (tens), then count along (units). Revoice 63: six tens put us in the sixties; three units walk us to 63. For 73 ask why the units digit stays 3. Linger on 36 beside 63 — same digits swapped — this is the whole module in one glance.
3. **Try It Together.** Talk each shade through together; pupils take turns at the board and the class agrees out loud. Before every tens-and-units shade, ask which row the tens put us in. Watch for 80 hunted in the eighties row instead of the end of the seventies, and the hop from 29 onto 30 at the start of the next row.
4. **Write two numbers in your copy.** Walk the row glancing that 72 sits above 27. This is whole-class copybook practice, not marking. If a pupil writes 27 first, point back at the tens digit in the riddle.
5. **Class Challenge.** Keep board work brisk — shade, check, move on. Answers in order: 34, 68, 69, 99. On one less than 70, listen for 60 (a ten-less slip). On 99, celebrate the last square on the map.
6. **What Did We Notice?.** Keep 36 and 63 shaded while hands go up. Listen for pupils saying the 6 is worth more in 63 because it sits in the tens place — revoice that. If someone only says '63 is bigger', point at the two shaded cells and ask what the 6 is worth in each number.

COMMON MISCONCEPTIONS

⚠ Pupils treat 6 tens and 3 units as the same number as 3 tens and 6 units — 'it's just 6 and 3 the other way round'.

Hold the digit cards and swap them in full view, then shade both 63 and 36 on the hundred square side by side. Ask what the 6 is worth in each cell until someone names tens versus units.

⚠ Pupils hunt for 80 in the eighties row, or land one less than 70 on 60.

For 80, trace the end of the seventies row with a finger — zero units means the last cell of the row below. For one less than 70, hop one step back along the row, not one step up; name the move out loud before they shade.

⚠ Pupils say '63 is bigger' without saying why the same digit changed value.

Point at the two shaded cells and refuse the size-only answer. Push: 'What is the 6 worth here? And here?' Revoice only when place value is named.

DIFFERENTIATION

EMERGING

- Stay on riddles that name the tens clearly (4 tens and 7 units, 7 tens and 2 units) and pre-point the row on the hundred square before they count along.
- During the copybook moment, place digit cards 7 and 2 above the page so the pupil matches tens-left, units-right before writing.

DEVELOPING

- After they shade ten more than 58, ask: ten more again — where do you land, and which digit changed?
- Before the final Class Challenge riddle, ask which row 9 tens put you in, and why 99 is the last cell on the map.

PROFICIENT

- Still at the board: same digits as 47, swapped — shade both and say in one sentence which is bigger and by how many tens.
- If the Student Activity Book page is ready early, send them on while the class finishes the last riddle; no new board task needed.

✚ **Cross-curricular:** Tie to Geography — house numbers on a terrace: the tens name the block, the units walk you along the doors.

ANSWER KEY

a) 54 and 29

b) 90

c) 17

Q1: 63

Q2: 47

Q3: 36

a) **Always** : 4 tens is 40, and 40 and 5 make 45.

b) **Never** : 3 tens and 6 units make 36, which is not the same as 63.

c) **Always** : The 8 is in the tens place, so it is worth 80.

d) **Sometimes** : 36 becomes 63, which is bigger, but 63 becomes 36, which is smaller.

EXTENSION SHEET · STRETCH ANSWERS

S1: 60

S2: 20

S3: 23

S4: 30