

Counting in 10s: a bundle at a time

CURRICULUM ALIGNMENT

ALG.PRR.2 identify and express relationships in patterns, including growing or shrinking shape patterns and number sequences.

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

When we count in tens we say 10, 20, 30, 40 and so on, jumping a whole ten each time instead of counting one by one.

→ Five pupils hold up their hands: 10, 20, 30, 40, 50 fingers.

→ In 10, 20, 30 the 0 never moves; the first digit climbs 1 to 2 to 3.

MODEL THIS ON THE BOARD

FINGERS IN TENS ON THE MAT

- 1 Five friends each hold up both hands. That is five bundles of ten fingers.
- 2 Say the tens as you point: **10**, then **20**, then **30**, then **40**, then **50**.
- 3 The units digit stays **0** each time while the tens digit climbs 1, 2, 3, 4, 5.

LESSON ARC

Open with five volunteers holding both hands up so the class sees five groups of ten before any board work. Move to the hundred-square interactive and shade 10, 20, 30, 40, 50 while the class chants, then freeze on the digits so pupils see the end 0 stay still and the first digit climb. Pupils take turns shading the next tens on the board, write the full tens line 10–90 in their copybooks, then run four brisk Class Challenge prompts checking each shade together.

TEACHING MOVES

1. **Getting Started.** Line up five volunteers with both hands raised. Give five seconds of silent think-time, take two or three estimates, then hold the total open — do not confirm 50 yet so the hundred-square still can land the answer.
2. **Watch and Notice.** Start from the five-hands still, then point to each shaded ten as the class chants 10, 20, 30.... On the digit still, tap the first digit then the end digit in 10, 20, 30 and say the board wording once: end digit stays 0, first digit climbs. Pause on 70 before naming it.
3. **Try It Together.** Chant from 10. Before every shade, freeze and ask the class for the next ten; only then let the pupil at the board shade. Rotate four pupils. If someone shades 11, stop and ask which digit should have stayed 0.
4. **Write the tens line in your copy.** Four quiet minutes: pupils write 10, 20, 30, 40, 50, 60, 70, 80, 90 in one careful line. Walk the row watching numeral formation and that every number ends in 0 — whole-class practice, not marking.
5. **Class Challenge.** Run one board prompt at a time; keep it brisk. Pupils take turns, class predicts the next ten, then checks the shade before moving on. On ‘two numbers after 40’ expect both 50 and 60; on eight groups of ten, listen for 80 before the shade.

6. **What Did We Notice?** Ask why the tens make a straight stripe and which figure changes. Re-voice: the stripe is straight because every landing ends in 0. If a pupil only says 'because of the tens', have them point at the end digit that stays still.

COMMON MISCONCEPTIONS

⚠ A pupil shades 11, 21 or 31 — they are counting on in ones instead of jumping a whole ten.

Freeze the board. Ask 'which digit should stay 0?' and have the class chant the next ten before any fresh shade. Point back at the clean 0-column stripe.

⚠ A pupil says the first digit stays the same and the end digit changes, or reads 30 as 'three and zero' with no place sense.

Point at 10, 20, 30 in order on the hundred square. Trace the end 0 that never moves, then the climbing 1 → 2 → 3. Have the class say 'three tens' for 30.

⚠ On 'eight groups of ten' a pupil shades 8 or 18, counting groups as ones rather than tens.

Return to the hands hook: eight pupils would show 80 fingers. Ask for eight jumps of ten on the square and wait for the chant 10...80 before shading.

DIFFERENTIATION

EMERGING

- Stay on the chant 10–50 only; teacher points the column while the pupil shades the matching end-0 number.
- During the copybook line, supply a dotted 10, 20, 30 starter so the pupil only has to keep the trailing 0 and climb the first digit.

DEVELOPING

- After the copybook line, ask: what comes after 90 if we keep the same rule — and why is it not on this hundred square?
- On a Class Challenge turn, ask the pupil to predict two jumps ahead (e.g. from 40 name 50 and 60) before shading.

PROFICIENT

- Challenge: start at 20 and count six tens — name the landing before touching the board, then shade to prove it.
- Ask: if the end digit stayed 5 instead of 0, would the shade still make a straight column? Have them point to show why or why not.

✂ **Cross-curricular:** Link to PE warm-up: pupils do star jumps in tens and chant 10, 20, 30... as each group of ten jumps lands.

ANSWER KEY

a) 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

b) 45

c) 82

Q1: 60

Q2: 80

Q3: 100

a) **Always** : Each jump adds one full ten so the list is exact.

b) **Always** : Every multiple of ten ends with a zero.

c) **Never** : The tens digit climbs by 1 on every jump.

d) **Always** : Each ten sits directly under the one before it.

EXTENSION SHEET · STRETCH ANSWERS

S1: 41

S2: 3

S3: 33

S4: 30