

Counting on 1, 2 and adding 0

CURRICULUM ALIGNMENT

NUM.OPS.2

select, make use of and represent a range of addition and subtraction strategies.

INTERACTIVES **Number Line Jumps** · challenge, display, explore

WHAT THIS LESSON TEACHES

Start on the bigger number and make little jumps forward for the 1 or 2 you are adding. Adding 0 means you stay put because nothing changes.

→ For $9 + 2$, stand on 9 and make two jumps: 10, then 11.

→ $12 + 0$ stays on 12. Nothing is added, so nothing changes.

MODEL THIS ON THE BOARD

PUPPET COUNTS ON FOR $9 + 2$

- 1 Stand on the bigger number **9** on the line.
- 2 Make the first little jump forward to **10**.
- 3 Make the second little jump forward to **11**.
- 4 The marker lands on **11**, so $9 + 2 = 11$.

LESSON ARC

Open with the class puppet counting $9 + 2$ all the way from 1 — pupils spot the slow way before the strategy is named. On the number-line interactive, model four sums: stand on the bigger number, make little jumps for 1 or 2, and freeze on $+ 0$ so the marker stays put. Pupils try four more sums together at the board, write one neat number sentence in their copy, then run the Class Challenge bank. Close on what adding zero does.

TEACHING MOVES

1. **Getting Started.** Give five seconds of quiet think-time on the puppet's slow count from 1. Take three answers. Listen for anyone who says start on 9 or jump on from 9 — do not name the strategy yet.
2. **Watch and Notice.** Run the four number-line demos in order: $9 + 2$, $7 + 1$, $12 + 0$, $14 + 2$. Point to the start, trace each jump, and let the class say the landing aloud. On $12 + 0$ hold the marker still and say 'we added nothing.' Revoice any pupil who says 'start on the bigger number.'
3. **Try It Together.** Call $6 + 1$, $10 + 2$, $13 + 0$, $14 + 2$. Between sums, clear the jumps and move the marker to the new start before the next pupil touches the board. Ask where to stand first before any jump is drawn. On $13 + 0$ wait for 'we stay put.' Gently send anyone counting from 1 back to the start number.
4. **Write the sum in your copy.** One careful line only: $9 + 2 = 11$. Walk the row glancing at $+$ and $=$ formation — whole-class copy practice, not marking.
5. **Class Challenge.** Keep board turns brisk: $8 + 1 \rightarrow 11 + 2 \rightarrow 15 + 0 \rightarrow 17 + 2$. Before each attempt ask 'where do we stand first?' Use Check after every answer. If a pupil counts from 1, freeze the marker and restart on the bigger number. If time is tight, demo $15 + 0$ yourself.
6. **What Did We Notice?.** Ask what happens when we add zero and why. Listen for 'nothing is added' or 'we stay put.' Revoice: adding zero leaves the number exactly as it was. Link back to the $12 + 0$ picture if a pupil says zero means empty.

COMMON MISCONCEPTIONS

⚠ Pupils still count 1, 2, 3... all the way up instead of standing on the bigger number.

Freeze the marker on the number line. Ask 'what number is already in your head?' then restart them on the bigger addend and count only the little jumps.

⚠ On a $a + 0$ sum, pupils make a jump anyway or change the number because they think every plus sign must move something.

Hold the marker still on the line and say the landing is the same as the start. Revoice: we added nothing, so nothing changes.

⚠ Pupils count the starting number as the first jump (for $9 + 2$ they say 9, 10 and land on 10).

Point to the marker already sitting on 9: 'we are already here — the jumps start after this.' Trace two forward hops only: 10, then 11.

DIFFERENTIATION

EMERGING

- Let them sketch the start number and the little jumps in their maths copy while watching the board.
- Stay with $+ 1$ only on the first two Class Challenge items; teacher supports the $+ 2$ and $+ 0$ turns.

DEVELOPING

- After a correct landing, ask them to say the jumps aloud in order before Check is pressed.
- On a $a + 0$ item, ask them to explain to the class why the marker must not move.

PROFICIENT

- Once the bank is done, pose $19 + 2$ or $18 + 0$ on the same line and ask them to predict the landing before any jump is drawn.
- Ask: 'why is starting on the bigger number fewer jumps than starting at 1?' — one clear sentence to the class.

✍ **Cross-curricular:** Link to PE line-up counts — start on the number already there and count on two more pupils rather than recounting from one.

ANSWER KEY

Your turn · Draw the jumps. Write where you land. A) 6 B) 6 C) 16 D) 20

Is it right? · It lands on 5. tick · It lands on 4. cross

Star challenge · Draw the jumps. Write where you land. 20

EXTENSION SHEET · STRETCH ANSWERS

S1: 17

S3: 18

S2: 18

S4: 2