

Lesson 35 **NUMBER****Back through ten: break the jump at the ten**

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

When a take-away crosses ten, stop at ten first, then take the rest. Ten is the stepping stone on the way down.

→ $13 - 5$: jump back 3 to land on 10, then jump back 2 more to land on 8.

→ $12 - 4$: break 4 into 2 and 2, back 2 to ten, then back 2 to eight.

MODEL THIS ON THE BOARD

13 GRAPES, EAT 5

- ① Start at **13**. First jump back **3** to land exactly on **10**.
- ② Then jump back the remaining **2** to land on **8**.
- ③ So $13 - 5 = 8$.

LESSON ARC

Open with Liam's 13 grapes and five eaten: more than ten left, or fewer? Hold quiet think-time, then move to the number-line-jumps interactive and model three take-aways that cross ten—first jump lands on ten, second jump takes the leftover. Try It Together keeps the start fixed on 13 while the class splits four different take-aways. Copybook locks $13 - 5$ as two jumps plus the sentence. Class Challenge rotates three new facts at the board with Check after each.

TEACHING MOVES

1. **Getting Started.** Show the grapes image and give five full seconds of silent think-time before hands. Take three answers only. Listen for anyone who already split the five into a jump to ten and a leftover—hold that idea without naming the method yet.
2. **Watch and Notice.** On the number-line-jumps interactive, plot $13 - 5$ as back 3 to ten, then back 2 to eight. Ask 'why stop at ten?' before the next line. Repeat with $12 - 4$ and $15 - 7$, pausing before each second jump so the class names the leftover. If a pupil wants one big jump, accept the landing, then ask whether the stop at ten made the second jump easier to see.
3. **Try It Together.** Keep the interactive locked on start 13. Call $13 - 5$, $13 - 4$, $13 - 6$, $13 - 7$ in order; clear old jumps each turn. The first jump is always back 3—ask what is left for the second jump (2, 1, 3, 4). Rotate four pupils at the board; the class agrees or corrects out loud. Pull one-jumpers back to the two-jump split.
4. **Write the sentence in your copy.** Pupils sketch a quick 0–20 line, plot the two jumps for $13 - 5$ that stop at ten, then write $13 - 5 = 8$ once. Walk the row glancing at minus and equals signs—this is practice, not marking.
5. **Class Challenge.** Three core turns only: $11 - 3$, $12 - 4$, $14 - 6$. Before each plot ask 'how many to get back to ten?' One pupil at the board, class confirms, Check after every turn. Keep it brisk—no re-teaching. If time remains, take one extension from the board bank.

6. **What Did We Notice?** Ask why stopping at ten makes the take-away easier. Revoice: we split so the first jump lands on ten, then the leftover is quick. Head off the idea that every take-away must stop at ten—only the ones that go past ten need the split.

COMMON MISCONCEPTIONS

⚠ Pupils jump the whole take-away in one go (e.g. one arc of 5 from 13) and skip the stop at ten. Accept their landing, then clear the line and insist on two jumps: ‘first jump must land exactly on ten.’ Replay $13 - 5$ as back 3, then back 2, and ask which second jump was easier to see.

⚠ Pupils choose the wrong first-jump size and miss ten—e.g. from 13 they jump back 4 or back 2 and land on 9 or 11. Freeze the interactive on their landing. Point at ten and ask ‘how many from 13 back to ten?’ Count the steps together (3), then rebuild the split from there.

⚠ Pupils say every take-away should stop at ten, even when the start is already below ten or the jump never crosses it. In the maths-talk, revoice the rule tightly: only when the take-away goes past ten do we break the jump. Offer a quick contrast aloud— $8 - 3$ needs no stop.

DIFFERENTIATION

EMERGING

- Stay with the fixed start of 13 and only two facts ($13 - 5$ and $13 - 4$) so the first jump is always back 3; teacher points to ten before the pupil plots.
- On the copybook line, pre-mark 13 and 10 so the pupil only draws the two jump arcs and writes the sentence.

DEVELOPING

- After the three Class Challenge facts, ask: for $14 - 6$, what is the leftover after landing on ten—and how do you know without counting every mark?
- Give $16 - 9$ on the same empty line: break 9 into the jump to ten and the leftover, and say both jump sizes before plotting.

PROFICIENT

- Stretch at the board: ‘start on 15, take away something that lands on 8—what two jumps did you use?’ Class checks whether the first jump really stopped at ten.
- If they finish early, send them into the Student Activity Book page while the class completes the last Class Challenge turn.

✍ **Cross-curricular:** Link to little-break fruit: count how many grapes or apple slices are left once someone has eaten past ten.

ANSWER KEY

Scaffold: visual check on the page

Q1: 5

Q2: 9 rolls

Q3: 8 apples

Q4: 7 cartons

Q5: 6

Q6: 3

a) Always : That is the rule for breaking the jump at ten.

b) Always : 13 is 3 above ten so the first part is always 3.

c) Sometimes : It helps when the take-away crosses ten, but not when both numbers are already below ten.

d) Never : The first jump must stop exactly on ten.

EXTENSION SHEET · STRETCH ANSWERS

S1: 6

S2: 9

S3: 9

S4: 7