

Making ten to add: filling the frame first

CURRICULUM ALIGNMENT

NUM.OPS.2

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

INTERACTIVES **Ten Frame** · challenge, display, explore

WHAT THIS LESSON TEACHES

When a sum crosses ten, break the smaller number so some counters fill the ten-frame first, then add what is left as ten and the leftover.

→ For $8 + 5$, move 2 counters to fill the frame (10), leaving 3: ten and 3 is 13.

→ After filling the frame for $9 + 3$, two counters sit outside: ten and 2 is 12.

MODEL THIS ON THE BOARD

BUNS IN THE TRAY

- 1 Start with 8 buns already in the ten-frame tray.
- 2 Count the empty spaces: 2 spaces still need filling.
- 3 Break the 5 waiting on the plate into 2 and 3.
- 4 Move the 2 into the tray to make a full ten.
- 5 Read the leftover 3 outside: ten and 3 is 13.

LESSON ARC

Open with the bun-tray image: eight buns in a ten-space tray and five waiting on the plate. Name the tray as a ten-frame. On the ten-frame interactive, model $9 + 3$ by counting the one empty space, moving one counter to fill, then revoicing ten and 2 is 12. Pupils take turns at the board on four sums while the class choruses ten and _____. Two number sentences go into the copybook. Class Challenge keeps three brisk board rounds. Student Activity Book page 24 is the paper follow-up.

TEACHING MOVES

1. **Getting Started.** Take three hands-up answers only — listen for ‘fill the empty spaces first’. Then say once, plainly: the bun tray and the ten-frame are the same thing, ten spaces waiting to be filled.
2. **Watch and Notice.** Point to the starting frame first and ask how many empty spaces the ten still has. Take two hands-up answers before you reveal the finished frame and revoice ten and _____. If you have a demo ten-frame, move physical counters beside the IWB on $9 + 3$, then $8 + 5$, then $7 + 4$.
3. **Try It Together.** Call each fact, then freeze the pupil at the board until the class answers how many empty spaces. After the frame is full, hold for a unison ten and _____ before naming the total. Co-move counters on the first turn if needed; watch for anyone still counting every counter from one.
4. **Write the number sentence in your copy.** Walk the row glancing at numeral formation and the equals sign. This is whole-class copybook practice, not marking — keep the pace moving.
5. **Class Challenge.** Keep board turns brisk. Before each Check, prompt how many empty spaces, then hold for ten and _____. Class confirms the total and you move on — no fresh explaining of the strategy.
6. **What Did We Notice?.** Ask why a full ten plus leftovers is easier than counting from one. Revoice: so we fill the frame first, then read ten and some more. Head off any claim that moving counters changes the total — same counters, just regrouped.

COMMON MISCONCEPTIONS

⚠ Pupils still count every counter from one after the frame is full, instead of reading ten and the leftover.

Cover the full ten with your hand and ask only for the counters outside. Then uncover and revoice ten and ____ is _____. Repeat until the class stops restarting the count.

⚠ Pupils think sliding counters into the empty spaces changes the total — ‘we moved some, so the sum is different now’.

Freeze mid-move. Point to the counters still on the board: same counters, just regrouped. Build $8 + 5$ both ways side by side and show both finish on 13.

⚠ Pupils break the larger addend, or guess the split, instead of counting the empty spaces on the starting frame.

Point only at the starting frame and ask how many empty spaces before any counter moves. That number is the exact piece to break from the second addend.

DIFFERENTIATION

EMERGING

- Stay on facts that need only one or two empty spaces ($9 + 2$, $8 + 3$) and co-count the empty cells aloud before the pupil moves any counter.
- Pre-place the starting number on the frame so the pupil only breaks the second addend and reads ten and _____.

DEVELOPING

- After a correct total, ask how they knew the split without recounting the full frame.
- Flip one fact so the smaller number starts on the frame ($5 + 8$) and check the empty-space count still drives the break.

PROFICIENT

- On the last Class Challenge turn, ask the pupil to name the break before touching counters: ‘I need 3 to fill, so I break 3 from 5’.
- Send fast finishers into Student Activity Book page 24 while the board rounds finish — same making-ten move, independent recording.

✚ **Cross-curricular:** Keep the bakery thread — pupils pack bun trays of ten for a class sale and add the extras still on the cooling rack.

ANSWER KEY

Your turn · Fill the tray. Write ten and the rest. A) $10 + 1 = 11$ B) $10 + 3 = 13$

Your turn · Fill the frame. Write the missing number. A) 6 B) 1

Is it right? · That is 14 buns. **tick** · That is 4 buns. **cross**

Star challenge · Fill the tray. Write ten and the rest. $10 + 7 = 17$

EXTENSION SHEET · STRETCH ANSWERS

S1: 1 fills the ten, so the total is 13

S3: 12

S2: 14

S4: 5