

Lesson 13 **NUMBER****Combining two sets: how many altogether?**

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 two sets join into one bigger set, count all the items to find how many there are altogether.

→ 3 apples and 2 bananas make 5 pieces of fruit altogether.

→ 4 red counters and 3 blue counters pushed together make 7 altogether.

MODEL THIS ON THE BOARD

FRUIT ON THE SHOP COUNTER

- 1 There are **3** apples in the first set.
- 2 There are **2** bananas in the second set.
- 3 Join both sets and count every piece: **3** and **2** make **5** altogether.

LESSON ARC

Open with the fruit-basket picture on the IWB: 3 apples and 2 bananas, and ask how many pieces of fruit that is altogether. Model two joins on the ten-frame interactive with two-colour counters—3 red and 2 yellow to 5, then 4 and 3 to 7—pointing to each group before counting the whole set. Pupils build four pairs at the board while the class counts aloud, then draw 4 and 2 as dots in their copybook and write the total. Class Challenge locks the first group; pupils add the second colour and check. Close by naming what altogether means.

TEACHING MOVES

1. **Getting Started.** Point to the apples, then the bananas, on the fruit-basket image. Give five seconds of quiet think-time before hands go up. Take three answers—listen for counting all five, or saying 3 and 2 without joining yet. If the image fails, sketch 3 round apples and 2 curved bananas in about ten seconds.
2. **Watch and Notice.** No plus or equals signs. On the first ten-frame, point to the 3 red, then the 2 yellow, then count the joined set to 5: ‘3 and 2 make 5 altogether.’ Repeat with 4 and 3 to 7. Ask: what stayed the same about how we found the total? Hold out for counting the joined set, not naming the parts alone.
3. **Try It Together.** One pupil builds at the board; the class watches and counts aloud. Call pairs in order: 2 and 3, 4 and 2, 5 and 4, 1 and 6. Builder places one colour first, then the other. If they stall, scaffold one colour at a time. Revoice any part-only answer with ‘so how many is that altogether?’
4. **Draw the dots in your copy.** Pupils draw 4 apple-dots and 2 banana-dots, then write the total beside them. Walk the rows glancing for two clear groups and one total numeral. If time is short, rough groups plus the total is enough—do not wait for perfect circles.
5. **Class Challenge.** Keep it brisk practice. Each challenge locks the first group in red; the pupil adds yellow, taps Check, and the class says the total with altogether. If someone counts from one, ask ‘how many are already there?’ before they restart. Confirm each answer with the class before the next.

6. What Did We Notice?. Ask what altogether means when two groups join. Listen for the total of the joined set. Revoice: ‘altogether means we count the whole group once the two groups have joined.’ If someone only lists the parts, ask ‘and when they join, how many is that?’

COMMON MISCONCEPTIONS

⚠ Pupils name the two parts and stop—‘3 and 2’—without giving the joined total.

Point back at the full ten-frame and ask ‘so how many is that altogether?’ Revoice their answer as ‘3 and 2 make 5 altogether’ so the class hears the word tied to the whole set.

⚠ Pupils count only one colour and ignore the second group on the frame.

Cover the colour they counted, reveal the other, then uncover both and count the whole set from the start of the frame so both groups are visibly included.

⚠ On Class Challenge, pupils ignore the pre-filled red group and recount from one as if the frame were empty.

Freeze the board and ask ‘how many are already there?’ Get them to name the locked group first, then add the yellow counters and count on from that number.

DIFFERENTIATION

EMERGING

- Stay with totals to 5 on the ten-frame (2 and 3, 1 and 4) while the class moves on; stand beside the builder and place one colour yourself so they only place the second.
- On the copybook dots, pre-draw the 4 apple-dots; the pupil only draws the 2 banana-dots and writes the total.

DEVELOPING

- After a checked Class Challenge total, ask ‘how did you know without starting at one?’ to surface counting on from the locked group.
- On the copybook page, add a second pair under the first—5 dots and 3 dots—and write that total too.

PROFICIENT

- Once a Class Challenge is checked, ask the builder: ‘if we added one more yellow, how many altogether?’ before moving on.
- In the copybook, invite a third group of dots and ask how many altogether when all three join—still counting the whole set, no symbols.

✂ **Cross-curricular:** Use the fruit hook to link to healthy-eating talk in SPHE—two kinds of fruit in a lunchbox, counted altogether.

ANSWER KEY

Your turn · Colour the frame. Write how many. A) 9 B) 10 C) 8

Is it right? · 9 and 1 make 10. **tick** · 9 and 1 make 9. **cross**

Star challenge · Colour the frame. Write how many. 10

EXTENSION SHEET · STRETCH ANSWERS

S1: 10

S3: 11

S2: 12

S4: 5