

Nineteen and twenty: the second frame fills up

CURRICULUM ALIGNMENT

NUM.PVT.2a

understand that digits have different values depending on their place or position in a number.

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

WHAT THIS LESSON TEACHES

Nineteen is one full ten-frame and nine counters in the second frame, leaving one space empty. Twenty is two full ten-frames side by side with no spaces left empty.

→ One full ten-frame and nine counters leave one empty space for 19.

→ Two full ten-frames make 20, and the 2 stands for two tens.

MODEL THIS ON THE BOARD

FILLING THE LAST SPACE TO MAKE 20

- 1 Start with **19**: one full ten-frame and nine counters in the second frame.
- 2 See the **one** empty space left in the second frame.
- 3 Fill that last space with one more counter.
- 4 Now both frames are full: that is **20**, two full tens and no loose ones.

LESSON ARC

Open with two pupils counting all their fingers, then push for a quicker way than one-by-one. Show 19 on the ten-frames interactive — one full frame plus nine, one cell empty — then fill it for 20 and name the 2 as two tens. Build 15, 17, 19, 20 together, counting empty spaces each time. Pupils write 19 and 20 in copybooks with a quick two-tens sketch. Class Challenge makes 20 from 19, 16 and 12; close on what the 2 stands for.

TEACHING MOVES

1. **Getting Started.** Invite two pupils to the front and give five seconds of quiet think-time before any hands go up on the quicker-way question. Take two or three answers; listen for tens or full hands and revoice those.
2. **Watch and Notice.** Point at the empty cell in 19, then show the 20 snapshot beside it. Point at each full frame while you name two tens, the 2, and the 0. Hold briefly for hands-up on what the 2 stands for, then revoice: two full tens. Two still snapshots only — then move on.
3. **Try It Together.** Call 15, then 17, then 19, then 20. After each build, ask how many spaces are still empty before the next pupil comes up. Rotate four pupils; the class agrees or corrects out loud — nothing is marked yet.
4. **Write 19 and 20 in your copy.** Before pens move, sketch two small ten-frames (or two groups of ten dots) labelled 20. Pupils copy that quick sketch, not a detailed picture. Walk the row glancing at the two tens drawn for 20; aim for everyone finished together in about four minutes.
5. **Class Challenge.** Stay at the board to queue pupils and watch builds — do not circulate. Keep it brisk: 19, then 20 from 19, then from 16, then from 12. After each, prompt: how many more fill every space? Watch for one-by-one counting past a full ten already there.

6. What Did We Notice?. Ask what the 2 in 20 stands for. Listen for two tens or two full frames and revoice: the 2 stands for two full tens. If a pupil says two units, point back at the two filled frames on the board.

COMMON MISCONCEPTIONS

⚠ Pupils count every counter one-by-one across both frames instead of seeing a full ten already there. Cover the full frame with your hand: 'this is already ten — don't count it again.' Uncover and have them start from ten on the second frame only.

⚠ Pupils say the 2 in 20 means 'two' or 'two units' — they treat it like the digit in the number 2. Point at the two filled frames. Ask 'two what?' and revoice until the class says two full tens. Write the 2 and the 0 underneath the frames.

⚠ Asked how many more make 20 from 16, pupils recount the whole double frame instead of counting only the empty spaces. Point at the four empty cells and have the class count just those empties in unison. 'Four more fill every space.'

DIFFERENTIATION

EMERGING

- Give support pupils a physical double ten-frame and counters at the table so they match each board build with their own counters.
- Stay on the jump from 19 to 20 first — one empty space — before asking them to bridge from 16 or 12.

DEVELOPING

- After a correct 20, clear one counter and ask what number is left — and how they know without counting from one.
- Before the 12-to-20 build, have them say the jump in one sentence: 'eight more fill every space.'

PROFICIENT

- After Class Challenge, ask why 19 starts with 1 but 20 starts with 2 — one copybook sentence linking each leading digit to full tens.
- Show 20 in the copybook as two quick bundles of ten without drawing full frames, then explain how that still shows the 2.

✂ **Cross-curricular:** Two 10c coins make 20c — the 2 means two tens of cent, just as two full frames make 20.

ANSWER KEY

Your turn · Write ten and how many more. 10 and 10 make 20

Your turn · Draw the counters. A) draw 19 B) draw 20

Is it right? · That is 15. tick · That is 10. cross

Star challenge · Write the missing numbers. 19, 20

EXTENSION SHEET · STRETCH ANSWERS

S1: 13

S3: 13

S2: 8

S4: 20