

Difference: how many more?

CURRICULUM ALIGNMENT

NUM.OPS.2

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

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

WHAT THIS LESSON TEACHES

The difference tells how many more one number is than another. Count the steps between them on the number line and write the gap with a take-away sum.

→ The difference between 7 and 4 is 3, because there are 3 steps between them. We write $7 - 4 = 3$.

→ $7 - 4 = 3$ means 7 is 3 more than 4.

MODEL THIS ON THE BOARD

DUBLIN LEAD KERRY ON THE BOARD

- ① Dublin have 7 points and Kerry have 4 points.
- ② Start just after 4 on the number line. Hop to 5, then 6, then 7.
- ③ That is 3 steps, so 7 is 3 more than 4.
- ④ Write the gap as $7 - 4 = 3$.

LESSON ARC

Open with Dublin 7 and Kerry 4, holding two cube towers (7 red, 4 blue) so the class sees the gap before any symbol. Move the same pair onto the number line: hop from after 4 to 7, name three steps as the difference, and write $7 - 4 = 3$ beside the line. Pupils take turns marking scoreboard-style pairs on the number-line interactive while the class counts the gap aloud. Class Challenge runs four quick pairs with each answer checked on the spot. Close by linking the take-away sign to comparison, not removal.

TEACHING MOVES

1. **Getting Started.** Take three hands-up answers only — no open call-outs. Hold the 7-red and 4-blue towers on the visualiser (or point at the board numbers and have the class picture the scoreboard gap). Push for 'Dublin by 3' rather than just 'Dublin'.
2. **Watch and Notice.** On the number line, start just after 4 and hop 5, 6, 7 — do not count 4 as a step. Write $7 - 4 = 3$ beside the line and name each part: start at 7, take away 4, difference 3. For 5 and 9, ask the class to predict the gap before you hop; for 8 and 10, give silent think-time first. Revoice: the difference is the gap; we compared, nothing went away.
3. **Try It Together.** Call scoreboard pairs (3 and 6, 6 and 10, 7 and 11, 9 and 14). One pupil marks both numbers; the class counts aloud from after the smaller number, then names the difference. Write the matching sentence beside the line when it helps. Rotate four pupils; class agrees or corrects out loud.
4. **Class Challenge.** Keep the four pairs brisk — pupils take turns, check each answer, class confirms, move on. Watch for anyone who counts the start number as a step (gap one too big); smile and recount together from after the smaller number. Invite a second pupil to check the hops and revoice the sentence when a gap is confirmed.

5. **What Did We Notice?**. Keep $7 - 4 = 3$ and the 4-and-7 line (or towers) visible. Ask how the take-away sign still told us how many more when nothing left the set. Listen for 'the steps between' and revoice: the difference is the gap; we compared, we did not take away.

COMMON MISCONCEPTIONS

⚠ Pupils count the smaller number as the first step, so 7 and 4 becomes four hops (4, 5, 6, 7) and they say the difference is 4.

Stop and recount together starting just after the smaller number: 5, 6, 7. Point at the towers — three extra red cubes, not four. Revoice: the gap starts after the smaller number and stops at the bigger.

⚠ Pupils hear the take-away sign and think something must leave the set — 'we took 4 cubes away, so 3 are left'.

Hold both towers still side by side. Nothing moved. Write $7 - 4 = 3$ beside the gap and say: same sign, different job today — it names how many more, not how many left.

DIFFERENTIATION

EMERGING

- Stay with gaps of 1–3 and keep the cube towers in view while peers move to the number line; pupil matches tower height to the hop count before writing the sentence.
- Pre-mark the smaller number on the line so the pupil only hops forward and counts.

DEVELOPING

- After a confirmed gap, flip the order on the board (e.g. show 3 and 5 after 5 and 3) and ask: same difference or different? Why?
- Ask them to say the full sentence ($10 - 6 = 4$) before the class counts, then check.

PROFICIENT

- Pose a missing-number scoreboard: ' $\square - 6 = 4$ — what was the bigger score?' Keep it as a quick IWB turn, not a new teaching point.
- Give a close pair past the practice range (15 and 11) and ask them to justify the gap in one sentence without hopping out loud.

✂ **Cross-curricular:** Stay with GAA scoreboards — pupils compare real half-time scores from a Dublin or Kerry match and name how many more.

ANSWER KEY

a) 2

b) 3

c) 5

Q1: 2 points

Q2: 3

Q3: 4

Q4: 5 points

Q5: 4

Q6: 8 blue jerseys

a) **Always** : There are exactly 3 steps from 4 to 7 on the number line.

b) **Always** : That gap of steps is the difference we write with a take-away sum.

c) **Never** : From 5 to 8 there are 3 steps, so 8 is 3 more than 5.

d) **Never** : The gap is always smaller than the larger number.

EXTENSION SHEET · STRETCH ANSWERS

S1: 1

S2: 2

S3: 8

S4: 7