

Lesson 56 ALGEBRA

Skip counting does real jobs: 2s, 5s or 10s?

CURRICULUM ALIGNMENT

ALG.PRR.2

identify and express relationships in patterns, including growing or shrinking shape patterns and number sequences.

INTERACTIVES Spin the Wheel (Maths) · challenge, display, explore

WHAT THIS LESSON TEACHES

Skip counting means jumping in equal steps of the same size (2s, 5s or 10s) instead of one by one. Name the jump that fits the PE job first, then chant the count to the total.

→ Six pairs of runners: 2, 4, 6, 8, 10, 12.

→ Five stacks of ten cones: 10, 20, 30, 40, 50.

MODEL THIS ON THE BOARD

7 STACKS OF TEN CONES

- 1 The job is stacks of ten, so the skip is **10s**.
- 2 Chant the jumps: 10, 20, 30, 40, 50, 60, **70**.
- 3 7 stacks of ten cones make a total of **70**.

LESSON ARC

Open with the PE-cupboard jumble: pairs of runners, hands, and stacks of ten cones waiting to be counted without one-by-ones. On the skip-count wheel, walk three worked jobs—eight pairs in 2s, five stacks in 10s, six hands in 5s—chanting each count-line onto the board. Pupils spin the wheel in Try It Together, naming which gear fits the jump before the class chants. Class Challenge works four jobs briskly at the board, then pupils write jump-plus-total for six PE jobs in their maths copy.

TEACHING MOVES

1. **Getting Started.** Show the PE-cupboard picture and take three hands-up ideas for a clever count. Revoice any mention of twos, fives or tens, but don't name the full matching rule yet—leave that for Watch and Notice.
2. **Watch and Notice.** Run the three wheel jobs in order. After eight pairs, ask 'why 2s and not 10s?' and revoice: each pair is 2, so the jump is 2. Point one jump per stack on the cones, and hold up a hand on each 5s landing if it helps. Write every finished count-line on the board as the class chants.
3. **Try It Together.** Rotate four pupils at the wheel. After each spin, pause: 'which PE gear fits this jump, and why?' Agree a fresh total, then lead the chant together. If a pupil loses the running total, revoice the last landing before the next jump.
4. **Class Challenge.** Work the four jobs in order at the board—brisk, not a fresh teach. Before each chant ask 'which skip fits, and why?' Land on 12, 20, 70, 18. Class confirms each answer before moving on.
5. **Pick the Skip on Paper.** Read jobs 1 and 2 aloud; class names skip and total, then pupils write (2s→10; 5s→15). Send them on for jobs 3–6 at seats. Point strugglers back to the board line: pair→2, hand→5, stack→10.
6. **What Did We Notice?.** Ask how you pick the best skip. Listen for group-size matching and revoice: 'the way the things are already grouped tells us the jump.' Head off 'always use tens because it's fastest'—tens only fit when the things come in tens.

COMMON MISCONCEPTIONS

⚠ A pupil treats the number of groups as the jump: six pairs means ‘count in 6s’ instead of six jumps of 2.

Stop and rebuild on the wheel. Point at one pair: ‘this group is worth 2, so every jump is 2—we make six of those jumps.’ Chant 2, 4, 6, 8, 10, 12 together.

⚠ A pupil adds the group count in one go (writes 6 for six pairs) instead of skip-counting six landings of 2 to reach 12.

Rebuild from the first landing on the wheel. Tap each jump aloud—2, then 4, then 6—so they see six jumps, not one addition of 6.

⚠ Pupils say ‘always jump in 10s—it’s fastest’ even when the gear is pairs or hands.

Hold the three board lines side by side. ‘Tens only fit when the things already come in tens. Pairs force 2s; hands force 5s.’

DIFFERENTIATION

EMERGING

- Keep totals small (three pairs, two hands, two stacks) and leave the board line pair→2, hand→5, stack→10 in view while they write.
- On copy jobs, pre-write the skip blank so they only fill the total after the class names the jump.

DEVELOPING

- After job 6, change one total on the spot—e.g. nine hands—and ask them to name the skip and chant to the new total.
- Give a mixed prompt: ‘the caretaker sees some pairs and some stacks—which two skips will he need, and why?’

PROFICIENT

- Invent one new PE job the wheel hasn’t used (e.g. bags of five bibs, bundles of ten beanbags), write the skip that fits, and chant to a total of their choice.
- Pose: ‘twelve runners not yet paired—can you still count them in 2s? What must you do first?’ Copybook moment, then share one strong answer.

✚ **Cross-curricular:** Stay in PE: after the lesson, count real cones stacked in tens or pairs of runners on the shelf using the matching skip.

ANSWER KEY

Q1: 12

Q2: 20

Q3: 50

Q4: 18

Q5: 60

Q6: 40

a) **Always** : Each pair is a jump of 2, so 2s always fit that job.

b) **Never** : Stacks of ten need jumps of 10, not 5.

c) **Always** : Equal jumps of 10 cover more each time than single steps.

d) **Sometimes** : 10s fit stacks of ten, but pairs need 2s and hands need 5s.

EXTENSION SHEET · STRETCH ANSWERS

S1: 3

S2: 6

S3: 24

S4: 30