

## Two halves make one whole: the fraction strip

### CURRICULUM ALIGNMENT

**NUM.FRC.2a** recognise and name fractions according to their part-whole relationships.

**INTERACTIVES** Fraction Strips · challenge, display, explore

### WHAT THIS LESSON TEACHES

When a whole is cut into two equal parts, each part is one half. Put both halves back together and they make the whole again.

→ A chocolate bar snapped into 2 matching pieces joins to make 1 whole bar.

→ A paper strip folded once: each side is 1 half of the whole strip.

### MODEL THIS ON THE BOARD

#### JOINING CHOCOLATE HALVES

- 1 Take 1 whole chocolate bar from the shop.
- 2 Snap it cleanly into 2 equal pieces. Each piece is one half.
- 3 Push the 2 halves back together.
- 4 The 2 halves make 1 whole bar again.

### LESSON ARC

Open with the snapped chocolate-bar photo: two matching pieces pushed back together so the class sees the whole return. On the fraction-strips interactive, name the whole, name each half, then cover the full length with both halves before comparing one half against the whole. Pupils take board turns shading both halves, then one half. Copybook: draw a strip with a middle fold-line and label each part half. Class Challenge is brisk shade-and-check practice. Maths-talk closes on equal parts; hand straight to the Student Activity Book.

### TEACHING MOVES

1. **Getting Started.** Hold the bar photo (or two paper halves) so both pieces are visible. Ask what happens when you push them together—take two or three answers, then join the pieces and revoice: the whole is back.
2. **Watch and Notice.** On the fraction-strips interactive, point and name one whole first. Reveal the halves strip: name each shaded part one half, then slide both halves to cover the full length—say two halves make one whole. On the last snapshot, pause until the class says one half is shorter than the whole before you revoice.
3. **Try It Together.** Call quick board turns: shade both halves; clear; shade only the first half; clear; shade both again so the whole returns. Before each turn ask ‘do the two parts match?’ Keep the watching class answering one half or two halves make one whole. Paper fallback: same turns on the printable halves worksheet under the visualiser.
4. **Draw the strip in your copy.** Sketch one model strip on the board—long rectangle, fold-line dead centre, half on each side—then pupils copy. Walk the rows checking the fold sits in the middle and both labels read half; this is whole-class practice, not marking.

5. **Class Challenge.** Brisk board turns only—shade to match the target, class confirms, move on. On one-half prompts watch for shading past the halfway mark; on the comparison target make the class say out loud that one half is shorter than the whole before Check. Finish orally: how many halves rebuild the whole?
6. **What Did We Notice?.** Ask why two halves always make one whole; insist on the words equal and whole. Revoice matches that cover the strip with nothing left over. If anyone offers any two pieces, show a quick unequal split beside an equal one so the gap or overlap is obvious.

### COMMON MISCONCEPTIONS

- ⚠ Pupils say any two pieces make a whole—even when one piece is clearly bigger than the other. Sketch or hold an unequal split beside an equal halves split. Point at the gap or overlap: only matching equal parts rebuild the whole with nothing missing and nothing left over.
- ⚠ On one-half shading turns, pupils colour past the halfway fold and still call it one half. Stop before Check. Trace the middle fold-line on the strip and ask: does your shading stop exactly here? Clear and re-shade only up to the fold so one half sits shorter than the whole.
- ⚠ Pupils treat one half as the same length as the whole strip because ‘it is still the bar’. Park one half under the whole strip on the interactive. Ask which is shorter—hold out for the class to say one half covers exactly half the length.

### DIFFERENTIATION

#### EMERGING

- Pre-draw the middle fold-line on their copybook strip so they only label each side half and shade up to the line.
- Stay on the chocolate-bar photo and the whole-strip view longer; bring them to board turns only for shade-both-halves before one-half prompts.

#### DEVELOPING

- After a correct one-half shade, ask them to point to the unshaded half and say what it is worth without tapping Check.
- On the oral finish question, press: if the two parts did not match, could they still make one whole—why not?

#### PROFICIENT

- After Class Challenge, ask them to explain how they know a shade is exactly one half using only equal and whole—no new strips.
- In the copybook, add a second strip freehand and mark a fold that is not centred; write one sentence on why those parts are not halves.

✂ **Cross-curricular:** Link to SPHE lunch-time sharing: a sandwich cut into two matching halves so each person gets a fair equal share.

### ANSWER KEY

**Scaffold:** visual check on the page

**Q1:** 1 more half

**Q2:** 2 halves

**Q3:** No

**Q4:** 4 halves

**a) Always :** Equal halves joined always rebuild the whole.

**b) Always :** A half is one of two equal parts so it is shorter than the whole.

**c) Never :** The whole is twice as long as one half.

**d) Never :** Exactly two halves make one whole, not three.

### EXTENSION SHEET · STRETCH ANSWERS

**S1:** 1

**S2:** 2

**S3:** 2

**S4:** 2