

Fair shares for two: one half

CURRICULUM ALIGNMENT

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

INTERACTIVES Pizza Slicer · challenge, display, explore

WHAT THIS LESSON TEACHES

One half is one of two equal parts of a whole. Both parts must be exactly the same size to make a fair share.

- A pizza cut into two matching pieces: each friend gets one half.
- Half of 8 cookies shared by two shoppers is 4 cookies each.

MODEL THIS ON THE BOARD

FAIR HALF OF A PIZZA

- 1 Start with one whole pizza for two hungry friends.
- 2 Cut straight down the middle into 2 matching parts.
- 3 Check carefully: both parts are the same size.
- 4 Each matching part is one half. Each friend gets 1 half.

LESSON ARC

Open with one pizza and two hungry friends: take three hands-up ideas for a fair share without naming half yet. On the pizza-slicer interactive, show two matching cuts and only then name one part a half. Pupils take turns setting 2 slices and shading 1 while the class checks the parts match. Everyone draws a circle and a middle cut in the maths copybook. Class Challenge keeps the same check brisk at the board. Close by revoicing what makes a fair half.

TEACHING MOVES

1. **Getting Started.** Show the one-pizza, two-friends image. Take three hands-up answers and listen for same, equal, or cut in the middle. Do not say half yet — park those words for Watch and Notice.
2. **Watch and Notice.** On the first pizza, point to both matching slices and name each a half only after pupils see they match. On the pancake, cover one half with your hand and ask what is left. If anyone says cut it anywhere, mime unequal pieces with your hands so one friend would grumble.
3. **Try It Together.** Call a whole — pizza, then pancake. One pupil sets 2 slices and shades 1. Before Check, ask the class: do the two parts match? Rotate several pupils. If a cut looks lopsided, ask what would make it fair. Paper circles work the same way if the slicer is down.
4. **Draw a half in your copy.** Pupils draw a rough circle, then one straight cut through the middle. Walk the rows watching the cut line only — shape quality does not matter. No marking; this is whole-class paper practice.
5. **Class Challenge.** Keep turns brisk: pupil cuts and shades, class confirms the parts match, move on. Watch for both slices shaded when one half was asked — revoice one half means one of the two equal parts. Press the match check before every Check tap.

6. What Did We Notice?. Ask what makes a share a fair half. Listen for same size or equal parts. Revoice: a half is one of two equal parts — if the parts do not match, it is not a fair half. Head off two pieces of any size.

COMMON MISCONCEPTIONS

⚠ Pupils say just cut it anywhere counts as a half — two pieces of any size feel like sharing.

Mime two unequal hand-slices so one friend gets a thin wedge. Ask who would grumble. Rebuild with matching parts on the pizza-slicer interactive before the word half is allowed.

⚠ When asked for one half, pupils shade both slices — the whole — because two parts are on the board.

Stop and revoice: one half means one of the two equal parts. Cover one shaded slice with your hand and ask what is left; only the single matching part is the half.

⚠ Pupils draw a cut that misses the middle, so one side is clearly bigger, but still call each piece a half.

Hold the copybook up (kindly) and ask the class: do both parts match? Fold a paper circle to show the cut must go through the middle for the parts to be equal.

DIFFERENTIATION

EMERGING

- Pre-draw the diameter on their copybook circle so they only shade one of the two parts.
- Stay on paper circles beside you and check match with a finger-trace before they shade.

DEVELOPING

- After the copybook circle, draw a second whole (pancake or cake outline) and cut it fair the other way — top-to-bottom instead of side-to-side — then check both still match.
- On the next board turn, ask them to explain why a lopsided cut fails before anyone taps Check.

PROFICIENT

- Stretch at the board: show a half with a cut that is not straight down the middle of a pizza — still two matching parts — and justify why it counts.
- In the copybook, sketch a whole that is not a circle (a rectangle sandwich) and mark one fair half; ready to explain same size to the class.

➤ **Cross-curricular:** Link to SPHE turn-taking: two pupils share one ball at break only when both get the same time — a fair half of the go.

ANSWER KEY

a) 4 slices shaded

b) No: one half is 4 slices

c) Yes: 4 slices and 4 slices match

Q1: 4

Q2: 3

Q3: 6

a) Always : This matches the rule for a fair half.

b) Always : Equal size is what makes each part a half.

c) Never : Unequal parts are not halves.

d) Never : Parts that do not match cannot be called halves.

EXTENSION SHEET · STRETCH ANSWERS

S1: 10

S2: 5

S3: 10

S4: 4