

Money: coins and notes; making amounts in euro and cent

CURRICULUM ALIGNMENT

MEA.MON.3

transfer knowledge of the base ten system in number to monetary contexts and use for purposes of calculation.

NUM.OPS.3

understand and apply flexibly the four operations; and the relationships between operations.

INTERACTIVES Coin Counter · challenge, display

WHAT THIS LESSON TEACHES

One euro is made of one hundred cent, written after a point. So €1.30 means one euro and thirty cent. Pick coins and notes that add up to the total, and use the biggest pieces first to make it in the fewest pieces.

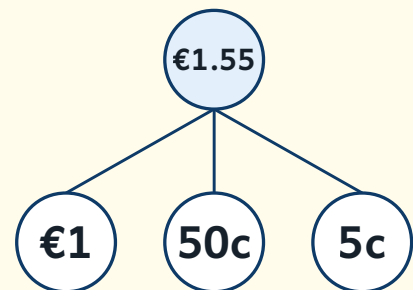
→ €2.75 is two euro and seventy-five cent.

→ €1.30 in fewest pieces is a €1 coin, a 20c and a 10c.

MODEL THIS ON THE BOARD

FEWEST COINS FOR €1.55

- 1 Read the amount: **€1.55** is 1 euro and 55 cent.
- 2 Start with the biggest coin that fits: one **€1** leaves 55c.
- 3 Next a **50c** coin leaves 5c, then one **5c** coin finishes it.



DISCUSSION STARTER

REFLECT

When you make an amount two ways, which set of coins do you prefer and why?

LESSON ARC

Open with hands-up ways to make 80c and write two or three pupil coin sets side by side on the board — no 'best' yet. On the coin-counter interactive, read four static amounts aloud (45c, €1.30, €2.75, €3.05), dwelling on the zero after the point in €3.05. Pupils then build 55c, €1.15, €2.40 and €3.08 at the board while the class watches the running total. Copybook: two different ways to make €1.55. Class Challenge pushes fewest-coins builds through to €3.70.

TEACHING MOVES

1. **Getting Started.** Take three hands-up answers only — not open call-outs. Write two or three of their coin sets for 80c side by side so the class can see the same total made different ways. Do not crown a 'best' set yet; that is the lesson's point.

- 2. Watch and Notice.** Read each total in euro and cent as a class. For 45c show two 20c and a 5c, then ask for another set. For €1.30 show the fewest build (€1, 20c, 10c). For €2.75 show one build and take a second from the class. On €3.05 stop hard: the zero straight after the point means three euro and five cent — point at each coin as the class tallies aloud.
- 3. Try It Together.** One pupil drags coins on the coin-counter interactive while everyone else watches the running total and agrees or corrects out loud. Work 55c, €1.15, €2.40, then €3.08. After each build ask whether a larger coin would have used fewer pieces. On €3.08 hold out for eight single cent and the zero-after-the-point reading before you move on.
- 4. Write It in Your Copy.** Pupils list two genuinely different coin-and-note sets for €1.55, one under the other, then add each list to check. Walk the room glancing for variety — no individual marking; this is whole-class copybook practice.
- 5. Class Challenge.** Keep the board work brisk: pupils take turns, check each answer, class confirms, move on. Before each build ask the class to predict the largest coin or note to reach for first. On €3.70 take predictions before the reveal — fewest is €2 + €1 + 50c + 20c.
- 6. What Did We Notice?** Ask when fewest-coins would help in a real shop and when a different set might be handier. Listen for lighter pocket, faster to hand over, easier for the shopkeeper. Re-voice a strong answer: 'fewest coins isn't the only right way — it's the tidiest one.'

COMMON MISCONCEPTIONS

⚠ Pupils read €3.05 as 'three euro and fifty cent' or 'three euro and five' without clocking the zero, then reach for a 50c or hunt for a missing 10c.

Stop and rewrite €3.05 under €3.50 on the board. Point: the digit straight after the point is tens-of-cents — a zero means no 10c or 20c from that place. Rebuild with three €1 coins and five 1c pieces while the class says 'three euro and five cent'.

⚠ Pupils treat one coin set as the only correct answer — 'you have to use a 50c for 80c' — and reject other valid builds.

Put two pupil sets for 80c back on the board side by side and tally both aloud to the same total. Ask: 'Same money, different pieces — which is wrong?' None is.

⚠ When aiming for fewest pieces, pupils still reach for small coins first (four 20c for 80c) and miss that a 50c does the work of several.

Before the next Class Challenge target, freeze and ask 'largest coin we can place without going over?' Build largest-first once as a class, then count the pieces against a small-coins-first build.

DIFFERENTIATION

EMERGING

- Stay on amounts under €1 on the coin-counter interactive (55c, 65c, 80c) while the class moves past €1; same largest-first talk, smaller totals.
- Give a short menu of coins already on the tray (€1, 50c, 20c, 10c, 5c) so the pupil only chooses which to tap, not the full set.

DEVELOPING

- After the €1.55 copybook lists, ask which of their two sets used fewer pieces — and whether swapping in one larger coin would shrink it further.
- On the next Class Challenge amount, insist they name the first coin before they drag anything.

PROFICIENT

- After a fewest-coins build of €3.70, challenge: make the same total with exactly six coins — no notes. Does it still work? How do you know?
- Pose: 'A shopkeeper needs 35c change and has no 20c left — which coins work?' Keep it as a quick board prediction, not a new lesson.

✓ **Cross-curricular:** Link to a school-fair stall: pupils plan exact fewest-coin payment for a €2.50 ticket from a mixed change pile.

ANSWER KEY

Scaffold: visual check on the page

Q1: 50c + 20c + 10c

Q2: €1 + 10c + 5c

a) Always : €1 = 100c exactly.

- b) Never : $20c+20c+5c$, or $20c+10c+10c+5c$, or nine 5c coins, and more.
- c) Always : $\text{€}2 = 200c$; three $50c = 150c$.
- d) Sometimes : Most amounts have several coin combinations; a single 1c has only one.

EXTENSION SHEET · STRETCH ANSWERS

S1: 380 cent

S2: 540 cent

S3: 850 cent

S4: 810 cent

S5: 850 cent