

Money: giving change

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

Word Problem · challenge

WHAT THIS LESSON TEACHES

To find change, start at the price and count on up to the money you paid. Hop to the next whole euro first, then add on the rest of the euro coins.

→ A 70c item paid with 1 euro: count on 30c to reach 1 euro, so change is 30c.

→ A 1 euro 30c item paid with 2 euro: count on 70c, so change is 70c.

MODEL THIS ON THE BOARD

COUNTING ON TO GIVE CHANGE

- 1 Start at the price **€3.45** on the number line.
- 2 Count on **5c** to the next 10c (**€3.50**), then **50c** to the next euro (**€4**).
- 3 Count on **€1** to reach the **€5** paid.
- 4 Add the hops: $5c + 50c + €1 = €1.55$.



DISCUSSION STARTER

REFLECT

Do you prefer counting on for change or subtracting from what was paid?

LESSON ARC

Open with a €1.30 rubber paid with €2 and ask pupils to count the change coin by coin rather than subtract. On the coin-counter interactive, model counting on from the price to the money paid, hopping to the next whole euro first — then a bigger €3.45—from-€5 tray. Pupils build sums together at the board, then work two count-on hops in their copy. Student Activity Book carries the practice.

TEACHING MOVES

1. **Getting Started.** Take three hands-up answers, not open call-outs. Listen for whether pupils take away or count up — both reach 70c. Revoice a count-up answer aloud: 'so you started at €1.30 and counted on to €2' — that seeds the whole lesson.
2. **Watch and Notice.** Touch each coin as you count on aloud on the coin-counter interactive. For the €3.45—from-€5 tray, land on €3.50 first, then €4, then €5 — hold out for the three separate hops. The bridge to the next euro is the move to make stick.
3. **Try It Together.** Rotate four pupils at the board; each starts at the price and drops change coins while the class counts aloud. For the €3.85 item, narrate '15c to €4, then €1 to €5 — €1.15 change'. Watch for pupils reaching for subtraction on the tricky one and steer back to the hops.
4. **Work the change in your copy.** Walk the room glancing for the count-on hops ($€1.65 \rightarrow €1.70 \rightarrow €2$) rather than a subtraction sum. Prompt any stuck pupil to reach the next whole euro first before going on.

5. **Class Challenge.** Brisk practice round — pupils take turns at the board and the class confirms before moving on. The tool records the change as a subtraction, so before the multi-euro items model saying the change in cent ('that's 225c') so pupils know what to type. Pause on the tidy 60c → 40c one.
6. **What Did We Notice?.** Listen for pupils naming the bridge to the next euro as the move that made the hard ones easy. Revoice: 'so you never took a big number away — you just hopped up in small steps.' Draw out that subtracting is a good way to double-check.

COMMON MISCONCEPTIONS

⚠ Pupils count on from the price but forget the euro, so €3.85 to €5 gives them '15c to €4' then stop — they read the change as 15c and miss the €1 hop.
Rebuild it on the coin tray: land on €4, then ask 'are we at €5 yet?' The visible gap forces the second hop. Count the coins on the tray together — 15c and €1 is €1.15.

⚠ Pupils reach for subtraction on the harder multi-euro items and get tangled, e.g. trying to line up €5.00 – €3.85 with borrowing.
Stop and steer back to the tray. Show that counting on avoids the big take-away entirely: hop to the next whole euro, then up. Keep subtraction for the maths-talk wrap as a checking method, not the main move.

⚠ When the tool asks for change in cent, pupils type €2.25 as '2.25' or freeze on the euro-to-cent switch.
Before those items, model the conversion aloud at the board: count on to €2.25, then say 'that's 225 cent'. Have the class say the cent figure in unison before anyone types.

DIFFERENTIATION

EMERGING

- Stay with the single-euro items (60c from €1, €1.40 from €2) on the coin tray while the class moves to multi-euro ones — teacher-supported at the board.
- In the copy, do just the first purchase (€1.65 → €1.70 → €2), writing each hop with the pupil rather than the abstract change amount.

DEVELOPING

- After the copybook items, swap in a €4.20 item paid with €5 and ask which hop comes first and why.
- Give a missing-payment variant: 'the change was €1.15 and the item cost €3.85 — what coin was handed over?'

PROFICIENT

- Narrate a two-item shop at the board — a €2.75 pen and a €1.40 rubber paid with a €5 note — and ask them to count on the change for the total. Or pull them ahead into the Student Activity Book page.

➤ **Cross-curricular:** Tie to SPHE — set up a class tuck-shop or fundraiser stall where pupils count on real change for buyers at the till.

ANSWER KEY

- a) item costs €3.50: €1.50
b) item costs €4.20: €0.80
c) item costs €2.75: €2.25
d) item costs €1.00: €4.00
e) item costs €4.60: €0.40
Q1: 10c
Q2: 20c
Q3: 35c

Q4: €2.85

- a) **Never** : Paying the exact price leaves nothing to hand back.
b) **Always** : You paid more than the price, so what is returned is smaller than what you gave.
c) **Always** : The hops from price to money paid add up to exactly the change.
d) **Sometimes** : It depends on the price; a dear item gives small change and a cheap item gives large change.

EXTENSION SHEET · STRETCH ANSWERS

S1: €70.82

S2: €3.86

S3: €3.61

S4: €16.59

S5: €54.81