

## Lesson 69 MEASURES

## Money: value for money and spending a set amount

## 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 (Class Budget · challenge, display, explore)

## WHAT THIS LESSON TEACHES

When you have a set amount of money to spend, add up the prices of everything you want to buy and make sure the total is that amount or less. You must not go over your budget.

→ You have €5. A €1.50 drink and a €1.20 snack come to €2.70, so you can afford both.

→ Two snacks cost €1.20 and €0.90: the cheaper one may be better value if it is just as good.

## MODEL THIS ON THE BOARD

## SPENDING UNDER A €5 BUDGET

- ① You have €5.00 to spend on a drink (€1.50), a snack (€1.20) and fruit (€0.85).
- ② Add the three prices in the column:  $€1.50 + €1.20 + €0.85 = €3.55$ .
- ③ €3.55 is under budget, so the change is  $€5.00 - €3.55 = €1.45$ .

$$\begin{array}{r}
 1 \text{ . } 50 \\
 1 \text{ . } 20 \\
 + 0 \text{ . } 85 \\
 \hline
 3 \text{ . } 55
 \end{array}$$

## DISCUSSION STARTER

**REFLECT** With a fixed amount to spend, do you add as you go or total at the end?

## LESSON ARC

Open with a hands-up tuck-shop puzzle: €5, three prices, could you buy all three? Then put the budget interactive up and work three cases side by side — one item, two that fit, two that overflow the cap. Pupils build shopping lists together at the board using the pre-set tuck-shop prices, then write one €4 list with change in their copy. The Class Challenge flips it: pupils set their own amounts to hit a target under the cap.

## TEACHING MOVES

1. **Getting Started.** Give ten seconds of quiet think-time, then take three hands-up answers only — no open call-outs. Welcome the rough adders ('about €4-something') as well as the exact ones, but don't confirm any total yet; hold that for the budget interactive.
2. **Watch and Notice.** Work the three budget cases one at a time. On the overflow case, pause before naming the total and ask 'will these two fit in €5?' — let the class predict, then reveal the bar overflowing. The line to leave them with: add first, check against the cap, then decide.
3. **Try It Together.** Reveal one numbered task at a time so the class always knows the current step. Before reading the running total off the interactive, make the class add the two prices and predict the amount left. On Task 4, if they're confident, contrast the snack bar (fits at €4.60) with the lunch roll (tips over at €5.90). Watch for pupils dropping the cents when adding €1.50 and €0.90.

4. **Write Your Shopping List in Your Copy.** Walk the room glancing for pupils lining the cents up under each other — this is copybook practice, not marking. If a total has crept over €4, nudge the pupil to swap one item rather than correct it for them.
5. **Class Challenge.** State up front that the tuck-shop prices are set aside — pupils now choose their own non-zero amount for each item to hit the target under €5. Point at the Check button once so they know it reports how far off they are, then use that gap to cue the next pupil. Keep the board work brisk.
6. **What Did We Notice?.** Revoice a strong answer: 'so you check the total against your money before you commit — and you can swap an item if it's too dear.' Head off 'cheapest = best value' by pointing back to the Try It Together pair that got closest to €5 without going over.

### COMMON MISCONCEPTIONS

⚠ Pupils add €1.50 and €0.90 and get €2.30 — they line up the digits carelessly and lose track of the cents, or read 0.90 as 0.09.

Rebuild the sum on the budget interactive so the running total shows €2.40, then set out the two amounts with real coins side by side — a €1 and a 50c, next to a 50c and two 20c and a 10c. Count the cents column aloud together.

⚠ Pupils decide the list with the fewest or cheapest items is automatically the 'best value'.

Put two lists on the board — one at €3.00, one at €4.60 — and ask which used the €5 budget better. Name best value as spending as close to the cap as you can without going over, not buying the least.

⚠ In the Class Challenge pupils set one item to zero to make the target easier.

Remind them every item must be above zero — press Check to show the miss, then ask what non-zero split would still hit the target. This forces the real trade-off between the two amounts.

### DIFFERENTIATION

#### EMERGING

- Give these pupils the coins and notes to physically make each price before adding — build €1.50 and €0.90 in hand, then combine and count.
- Keep their copybook €4 list to two items only, and let them choose from the whole-euro-friendly prices (biscuits €0.75, fruit €0.90) so the addition stays gentle.

#### DEVELOPING

- After the copybook list, ask them to find a second list that costs a different total but still fits €4 — then say which of their two lists is the better value.
- Pose a missing-cost variant: 'you spent €3.60 and had one drink — what else did you buy?'

#### PROFICIENT

- Ask: what is the largest total you can make from the tuck-shop list that stays under €5, and can you prove no other combination gets closer? Have them work it in the copybook while the class runs the Class Challenge.
- Give a raised cap of €10 and ask them to plan a list for two people that treats both fairly — same value each — and explain the split.

✓ **Cross-curricular:** Link to SPHE — pupils plan a €5 spend for a real class event and justify their choices as sensible with limited money.

### ANSWER KEY

a) €2.40

b) €1

c) yes

Q1: €3.60

Q2: €2.70

Q3: €2.80 (under €3.00)

a) **Always** : Staying at or under your budget means you can pay for it.

b) **Always** :  $€1.50 + €1.20 = €2.70$ , which is less than €5.00.

c) **Sometimes** : Drink and fruit (€2.35) and snack and fruit (€2.05) fit; drink and snack (€2.70) do not.

d) **Never** : Spending more than you have means you cannot pay, so there is no change.

## EXTENSION SHEET · STRETCH ANSWERS

**S1:** €16.59

**S2:** €11.21

**S3:** €38.69

**S4:** €54.81

**S5:** €52.60

**Investigation:** Spend exactly €5? — open-ended; scan pupils' working for valid solution paths rather than a single answer.