

## Comparing prices: best value

### CURRICULUM ALIGNMENT

MEA.MON.4

solve and pose practical tasks to investigate and make informed judgements about transactions and financial plans.

NUM.OPS.4

build upon, select and make use of a range of operation strategies.

NUM.FRC.4b

investigate proportionality and ratios of quantities (sets).

INTERACTIVES (Best Buy Compare · challenge, display, explore)

### WHAT THIS LESSON TEACHES

To find the best value, work out the price of one single item by dividing the pack price by how many are in the pack. The lower price per item is the better deal.

→ €2.40 for 6 yoghurts is  $€2.40 \div 6 = 40\text{c}$  per pot.

→ €3.60 for 3 bars is  $€3.60 \div 3 = €1.20$  per bar.

### MODEL THIS ON THE BOARD

#### CHOCOLATE BARS BEST VALUE

- 1 Pack A: €3.60 for 3 bars. Divide  $3.60 \div 3 = €1.20$  per bar.
- 2 Pack B: €4.80 for 4 bars. Divide  $4.80 \div 4 = €1.20$  per bar.
- 3 Both cost the same per bar, so neither is better value.

### LESSON ARC

Open with two shelf tags — a €2.40 6-pack against a €3.20 8-pack of yoghurts — and let pupils argue on total price before the reveal. Watch and Notice runs three comparisons pivoting on 'find the price of one first', including a weight-based one split into 100 g pieces. Work  $€3.60 \div 3$  versus  $€4.80 \div 4$  together at the board, then pupils drill three copybook comparisons. Class Challenge runs four tag pairs; the seat-work 'Spot the Catch' adds the waste-versus-value twist. Pupil Practice page carries the written drill.

### TEACHING MOVES

1. **Getting Started.** Take three hands-up answers, not open call-outs. When a pupil compares the totals (€2.40 vs €3.20), don't correct it — let it sit, because that's the exact trap the lesson unpicks. Ask 'what would you need to work out before you could be sure?'
2. **Watch and Notice.** On the first tag, hold before revealing — ask which is better and let pupils back the cheaper-looking €2.40 pack before both land on 40c. On the weight tag, draw out that 1 kg is ten 100 g pieces and 250 g is two-and-a-half; pause on  $€4.50 \div 10 = 45\text{c}$  against  $€1.20 \div 2.5 = 48\text{c}$  and ask why equal 100 g pieces make the packs fair to compare.
3. **Try It Together.** Pupils take turns at the board. Have the class predict per-bar price before anyone taps reveal ( $€3.60 \div 3 = €1.20$ ;  $€4.80 \div 4 = €1.20$  — a tie that surprises anyone expecting the bigger pack to win). Watch for pupils dividing price by price instead of price by pack size.
4. **Work Out the Deals in Your Copy.** Walk the room glancing for two clear division lines per comparison and a circle round the cheaper per-unit price — this is practice, not marking. Redirect any pupil dividing the two prices by each other back to price  $\div$  pack size.

5. **Class Challenge.** Keep board work brisk — pupils predict the winner, tap reveal, class confirms, move on. The pasta needs both packs cut into 100 g pieces ( $90c \div 5 = 18c$  against  $€1.70 \div 10 = 17c$ , big pack wins narrowly); on the near-tie kitchen roll (80c vs 70c per roll) have them predict first, as the smaller pack tempts them.
6. **Spot the Catch.** Pupils work the three individually while you circulate. The middle problem is the heart of it: the 30-box is cheaper per egg but wrong if the eggs spoil unused. Head off the reflex that lowest per-unit always wins — reconcile answers aloud at the end.
7. **What Did We Notice?.** Listen for pupils naming waste and need. Revoice a strong answer: 'so better value per item is not the same as better value for me.' Push for a real example from their own shopping.

### COMMON MISCONCEPTIONS

⚠ Pupils pick the pack with the lower total price — 'the yoghurts are €2.40, that's cheaper than €3.20, so it's better value' — comparing totals instead of the price of one.

Stay on the Getting Started tags and work both to the price of one pot side by side ( $€2.40 \div 6$  and  $€3.20 \div 8$ ). Same per-pot price on very different totals shows the total alone can't decide it.

⚠ Pupils divide the two prices by each other rather than price by pack size — e.g.  $€3.60 \div €4.80$  — because both numbers on the tag are money.

Point at the tag and name each number aloud: 'this is money, this is how many bars'. The division is always money  $\div$  count, never money  $\div$  money. Redo the line as  $€3.60 \div 3$  at the board.

⚠ Pupils freeze on the weight tags because there's nothing to count — 'there aren't any pots'.

On the board, chop each block into 100 g pieces: a 1 kg block is ten pieces, a 250 g block is two-and-a-half. Now they divide the price by the number of 100 g pieces, exactly like counting pots.

### DIFFERENTIATION

#### EMERGING

- Stay on the counted packs (yoghurts, bars, eggs) and hold weight tags back — the extra step of cutting into 100 g pieces is where these pupils lose the thread.
- Give the copybook line half-built: write 'price  $\div$  pack size =' with the numbers already placed, so pupils only perform the division, not set it up.

#### DEVELOPING

- After the copybook page, ask pupils to invent a third bananas tag that would beat both — €1.80 for 6 and €2.80 for 10 — and prove it with a division line.
- On the pasta tag, ask by how much per 100 g the big pack wins, not just which wins — pushes them from 'which' to 'how much cheaper'.

#### PROFICIENT

- During Class Challenge, narrate a harder variant aloud: a 750 g pack at €1.35 against the 500 g and 1 kg pasta — can they slot it in the value order without a calculator?
- Pose: a shop makes its big pack look better by rounding the per-unit price down. Explain how rounding could hide the truer-value pack, using the near-tie kitchen roll figures.

✓ **Cross-curricular:** Tie to SPHE — pupils bring a real shelf photo from a home shop and work out whether the family's usual pack is the best-value one.

### ANSWER KEY

a) 40c

b) 40c

c) 35c (yoghurts both 40c)

Q1: 50c

Q2: 60c

Q3: 25c

Q4: 30c; yes (better than 35c)

Q5: 30c

a) **Sometimes** : A lower total can still cost more per item if the pack is smaller.

b) **Always** : That is exactly how unit price is found.

c) **Always** : Best value is decided by the cheaper unit price.

d) **Sometimes** : 6 for €2.10 doubles to 12 for €4.20, so it can be compared with 12 for €3.60 straight away; other deals need the price of one.

## EXTENSION SHEET · STRETCH ANSWERS

**S1:** €461.89

**S2:** €1218.59

**S3:** €705.99

**S4:** €1238.67

**S5:** €1196.89