Draw a Water Bottle: Cap, Body Contour, and Label Placement

Original tasks 1, 2, 3, 4 / complete keys

Task 1

A bottle is 10 units tall. The cap and neck zone is 2 units, the body is 6 units, and the base is 2 units. Mark the zone boundaries from the top.

Answer: Boundaries at 2 units and 8 units from the top; base zone runs from 8 to 10 units.

Reason: Add the first two zones: 2 + 6 = 8, so the body ends at 8 units. The base occupies the remaining 2 units.

Check: Confirm that 2 + 6 + 2 = 10 units and that each boundary is measured from the same top mark.

Task 2

A cap is 4 units wide and the neck is 3 units wide. How much overhang should appear on each side if the cap is centered?

Answer: 0.5 units on each side.

Reason: The cap is 1 unit wider than the neck. Centering splits the difference equally: 1 ÷ 2 = 0.5 units per side.

Check: Add the two overhangs to the neck width: 0.5 + 3 + 0.5 = 4 units, matching the cap width.

Task 3

A body is 8 units tall. You want a label box in the middle third. Give the start and end heights from the top of the body.

Answer: Start at 2.67 units and end at 5.33 units from the top of the body, using rounded values.

Reason: One third of 8 is about 2.67. The middle third runs from 2.67 to 5.33 units.

Check: Check that the box height is about 2.67 units and that the top and bottom margins are each about 2.67 units.

Task 4

At the label height, the body is 6 units wide. You want 1-unit margins on each side. What label width fits?

Answer: 4 units.

Reason: Subtract both margins from the body width: 6 − 1 − 1 = 4 units.

Check: Add the margins back: 1 + 4 + 1 = 6 units, matching the body width.

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Source rubric / reflection

- [ ] Vertical axis is present and zones are marked consistently.
- [ ] Cap overhangs the neck on both sides.
- [ ] Body contours mirror each other at three checked heights.
- [ ] Base is closed and narrower than the widest body point.
- [ ] Label box sits in the middle third of the body with equal side margins.
- [ ] Lettering uses baseline-to-midline x-height and is legible; alternative letter styles are acceptable.

Reflection: What did you check, what did you change, and what will you try next?