Draw an Anchovy: Body Curve and Fin Placement Guide

Original tasks 1, 2, 3 / complete keys

Task 1

On a 10 cm body length with x-height 2 cm, mark the dorsal fin front and rear positions in centimeters from the nose using the 40 and 60 percent rule.

Answer: Front at 4 cm, rear at 6 cm.

Reason: 40 percent of 10 cm is 4 cm; 60 percent of 10 cm is 6 cm.

Check: Multiply body length by 0.40 and 0.60; confirm the marks lie on the top curve.

Task 2

A drawing has a fixed midline 3 cm above the baseline, so the x-height is 3 cm. The body curve dips 4 cm below the midline at the midpoint. Is the curve within the allowed one x-height? Explain.

Answer: No. The dip is 4 cm, which exceeds the x-height of 3 cm.

Reason: X-height is the fixed baseline-to-midline distance, 3 cm. The curve must stay within one x-height of the midline, so the maximum dip is 3 cm.

Check: Compare the dip measurement to the x-height; if dip is greater, reduce it.

Task 3

Place the anal fin on a 12 cm body length using 65 and 80 percent marks. Give the positions in centimeters and state where the fin sits relative to the dorsal fin.

Answer: Front at 7.8 cm, rear at 9.6 cm. The anal fin sits below the body curve, behind the dorsal fin.

Reason: 65 percent of 12 cm is 7.8 cm; 80 percent is 9.6 cm. The dorsal fin spans 4.8 to 7.2 cm, so the anal fin zone begins after the dorsal fin ends.

Check: Multiply 12 by 0.65 and 0.80; compare the anal fin zone to the dorsal fin zone.

Draw an Anchovy: Body Curve and Fin Placement Guide

Original tasks 4 / complete keys

Task 4

A pectoral fin base is marked at 3 cm from the nose on a 10 cm body length, on the midline. Describe the correction and the new position using the 20 percent rule and half an x-height below the midline with x-height 2 cm.

Answer: Move the base to 2 cm from the nose and 1 cm below the midline.

Reason: 20 percent of 10 cm is 2 cm. Half an x-height is 1 cm below the midline.

Check: Multiply body length by 0.20; measure half the x-height downward from the midline.

Draw an Anchovy: Body Curve and Fin Placement Guide

Source rubric / reflection

- [ ] Body curve is smooth and stays within one x-height of the midline.
- [ ] Dorsal fin front edge is between 35 and 45 percent of body length from the nose.
- [ ] Dorsal fin rear edge is between 55 and 65 percent of body length.
- [ ] Anal fin front edge is between 60 and 70 percent of body length.
- [ ] Anal fin rear edge is between 75 and 85 percent of body length.
- [ ] Pectoral fin base is behind the head and below the midline.
- [ ] Tail fork is symmetrical about the midline.
- [ ] Valid alternatives in fin shape and curve depth are accepted if placement zones are met.

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