Serpent Drawing: Body Curve and Head Construction

Original tasks 1, 2, 3 / complete keys

Task 1

A serpent centerline has two bends. The neck width is 3 cm. Using the hypothetical guide that head width is 1.5 times neck width, calculate the head width. Then describe where the eye should be placed on the head.

Answer: Head width = 1.5 × 3 cm = 4.5 cm. The eye should be placed on the upper half of the head, closer to the back than the snout.

Reason: Multiply the neck width by 1.5 to get the head width. The eye position follows the construction rule for serpent heads.

Check: Verify the multiplication: 3 × 1.5 = 4.5. Confirm the eye is described as upper half and toward the back.

Task 2

A body outline is drawn with a neck width of 2 cm and a tail width of 0.5 cm over a centerline of length 18 cm. If the width decreases evenly, what is the width at the midpoint of the centerline?

Answer: Midpoint width = (2 cm + 0.5 cm) ÷ 2 = 1.25 cm.

Reason: For an even taper, the midpoint width is the average of the neck and tail widths.

Check: Add 2 and 0.5 to get 2.5, then divide by 2 to get 1.25 cm. Check that the value lies between 0.5 and 2.

Task 3

A student draws a serpent with three bends. The first bend uses a 4 cm radius arc, the second uses a 2 cm radius arc, and the third uses a 4 cm radius arc. The student claims the bends are balanced. Is this claim supported by the radii? Explain.

Answer: No. The middle bend has a smaller radius (2 cm) than the outer bends (4 cm), so the bends are not evenly balanced. A balanced set would use similar radii, such as 4 cm, 4 cm, and 4 cm, or a gradual change.

Reason: Balance in curve size is judged by similar radii. A sudden smaller radius creates a tighter bend that stands out.

Check: Compare the three radii: 4, 2, 4. The middle value differs from the others, so the claim is not supported.

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Original tasks 4 / complete keys

Task 4

A serpent head is constructed with an oval 3 cm wide and a snout wedge 1.5 cm long. The neck width is 2 cm. Using the hypothetical guide that head width should be about 1.5 times neck width, does the oval width meet the guide? Show the arithmetic.

Answer: Guide head width = 1.5 × 2 cm = 3 cm. The oval width is 3 cm, so it meets the guide.

Reason: Multiply neck width by 1.5 and compare to the oval width.

Check: 2 × 1.5 = 3. The oval width equals 3 cm, so the check passes.

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Source rubric / reflection

- [ ] Body curve is smooth and continuous with no sharp corners.
- [ ] Centerline flows from tail to neck without crossing itself.
- [ ] Head is constructed from an oval and a wedge, with the eye on the upper half.
- [ ] Body width tapers gradually from neck to tail.
- [ ] Head width is proportionate to neck width, using a stated reference.
- [ ] Construction lines are light and can be erased cleanly.
- [ ] Final outline is clear and connects head to body smoothly.
- [ ] Valid alternative curve shapes are accepted if they meet the smoothness and proportion checks.

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