Drawing a Snake Head: Jaw, Eye, and Scale Construction

Original tasks 1, 2 / complete keys

Task 1

Draw a snake head profile with a 10 mm eye diameter. Place the eye center 10 mm below the top of the head and 15 mm above the mouth line. Mark the hinge 10 mm in front of the eye center. Describe your final placement.

Answer: The eye center is 10 mm below the top of the head and 15 mm above the mouth line, with the hinge 10 mm in front of the eye center. The placement matches the hypothetical proportions.

Reason: One eye diameter below the top and one and a half eye diameters above the mouth line are the lesson's check values. The hinge sits one eye-width forward of the eye center.

Check: Measure the three distances with a ruler and compare to the eye diameter. Confirm the eye is above the mouth line and behind the hinge.

Task 2

A drawing has scale rows that overlap from back to front. The student wants to keep this direction. State whether this is valid under the lesson convention and describe one adjustment that would improve consistency.

Answer: Back-to-front overlap is a valid alternative if applied consistently to every row. To improve consistency, ensure each scale's front edge sits over the rear edge of the scale behind it, and keep row spacing even.

Reason: The convention defines front-to-back overlap as the default, but the rubric accepts alternatives with consistent direction. The key is uniform application.

Check: Inspect three adjacent rows: confirm the overlap direction is the same in all three and that spacing between scale centers is roughly equal.

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Original tasks 3, 4 / complete keys

Task 3

Using a 14 mm eye diameter, calculate the hypothetical top-of-head distance and mouth-line distance. Then state where the hinge should be relative to the eye center.

Answer: Top-of-head distance is 14 mm (one eye diameter). Mouth-line distance is 21 mm (one and a half eye diameters). The hinge should be about 14 mm in front of the eye center.

Reason: Multiply the eye diameter by 1 for the top distance and by 1.5 for the mouth-line distance. The hinge offset is one eye-width forward.

Check: Recompute 14 × 1 = 14 and 14 × 1.5 = 21. Measure the drawing to confirm the hinge offset is close to 14 mm.

Task 4

A student's scale rows cross the eye outline. Describe two changes that would fix this while keeping the scale convention.

Answer: First, stop each row at the eye outline and resume behind it. Second, draw the eye outline darker before adding scales so the boundary is clear. Keep the overlap direction and row spacing unchanged.

Reason: Rows should not cross the eye because the eye is a feature, not a scale area. Stopping rows at the outline preserves the convention and keeps the eye readable.

Check: Check that no scale line enters the eye circle. Confirm the rows on either side of the eye still share the same overlap direction and spacing.

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Source rubric / reflection

- [ ] Jaw hinge is clearly marked and jaw lines meet at the hinge.
- [ ] Upper jaw extends slightly beyond the lower jaw at the snout, or a recorded reference justifies otherwise.
- [ ] Eye center sits above the mouth line and behind the hinge by about one eye-width.
- [ ] Scale rows use a consistent overlap direction and even spacing.
- [ ] Scale size decreases toward the snout and increases toward the back of the head.
- [ ] Construction guides are erased or faint in the final drawing.
- [ ] Valid alternative scale shapes are accepted if row structure and overlap direction are consistent.

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