Dragon Line Drawing: Head, Wings, and Scales

Original tasks 1, 2, 3 / complete keys

Task 1

A dragon head has a cranium diameter of 2 cm. The snout is drawn 3 cm long. Is the snout length within the target of about 1.5 cranium diameters? Show the arithmetic.

Answer: Target snout length is 1.5 times 2 cm = 3 cm. The drawn snout is 3 cm, so it matches the target exactly.

Reason: Multiply cranium diameter by 1.5 to get the target, then compare with the drawn length.

Check: Recompute 1.5 times 2 and confirm it equals 3; measure the snout on the page to confirm 3 cm.

Task 2

U is measured as 1.0 cm. A student draws scale rows with spacing 0.6 cm. Convert the spacing to U and state whether it is within 0.2 cm of the 0.5 U target.

Answer: Spacing is 0.6 cm divided by 1.0 cm = 0.6 U. The target is 0.5 U, so the difference is 0.1 U, which equals 0.1 cm. This is within 0.2 cm, so it passes.

Reason: Divide spacing by U to get U units, then compare the difference to the tolerance.

Check: Multiply 0.6 U by 1.0 cm to recover 0.6 cm; confirm the difference from 0.5 U is 0.1 cm.

Task 3

A wing has three ribs with tips spaced 1.2 cm apart. U is 0.8 cm. Convert tip spacing to U and say whether it is close to the 1 U target.

Answer: Tip spacing is 1.2 cm divided by 0.8 cm = 1.5 U. The target is 1 U, so the spacing is 0.5 U larger, which is not close; adjust tips to about 0.8 cm apart.

Reason: Divide tip spacing by U, compare to 1 U, and suggest a corrected spacing in centimeters.

Check: Multiply 1 U by 0.8 cm to get 0.8 cm; measure the adjusted tips to confirm about 0.8 cm.

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Original tasks 4 / complete keys

Task 4

A neck is drawn 5 cm long. The cranium diameter is 2 cm. The target neck length is about two cranium diameters. Does the neck meet the target? Show the arithmetic.

Answer: Target neck length is 2 times 2 cm = 4 cm. The drawn neck is 5 cm, which is 1 cm longer than target. It does not meet the target exactly; shorten by 1 cm or accept as a valid alternative if recorded.

Reason: Multiply cranium diameter by 2, compare with drawn length, and state the difference.

Check: Recompute 2 times 2 = 4; measure the neck to confirm 5 cm and the 1 cm difference.

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Source rubric / reflection

- [ ] Head, wings, and scales are present and drawn with line only.
- [ ] Construction sequence is visible: head, neck, wings, then scales.
- [ ] Wing rib count matches on both sides and tips are spaced consistently.
- [ ] Scale rows are parallel to body contours and spacing is consistent within 0.2 cm.
- [ ] U is measured from baseline to midline of three x letters and recorded.
- [ ] Contour-practice panel contains three labeled exercises.
- [ ] Valid alternatives: any consistent letter style, any rib count of three or more, any scale zone choice that preserves clarity.

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