Contour Line Drawing of a Conch Shell: Outline and Lip Edge Study

Original tasks 1, 2, 3 / complete keys

Task 1

A shell is 14 cm wide and 7 cm high. Your drawing is 10 cm wide and 5 cm high. Calculate both width-to-height ratios and state whether the proportion is acceptable within about ten percent.

Answer: Actual ratio = 14/7 = 2.0. Drawn ratio = 10/5 = 2.0. The ratios match, so the proportion is acceptable.

Reason: Divide width by height for both actual and drawn measurements, then compare the two results.

Check: Re-measure width and height in the same unit and recalculate; confirm the two ratios differ by no more than about ten percent.

Task 2

A shell is 9 cm wide and 6 cm high. Your drawing is 6 cm wide and 5 cm high. Calculate both ratios and explain whether the drawing is too tall, too wide, or acceptable.

Answer: Actual ratio = 9/6 = 1.5. Drawn ratio = 6/5 = 1.2. The drawn ratio is lower, so the drawing is too tall relative to its width; it is not acceptable within about ten percent.

Reason: A lower width-to-height ratio means the height is large compared with the width. Compare 1.2 with 1.5; the difference is about twenty percent.

Check: Recalculate both ratios and compare the difference as a percentage of the actual ratio; confirm the drawn height is reduced or the drawn width increased.

Task 3

Describe how to draw the lip edge as a continuous line from the baseline to the top of the lip and back down, using a slow-contour approach. Include one checkpoint.

Answer: Start at the baseline where the lip edge begins. Move your eye slowly along the curve and let the tool follow without lifting. At the top of the lip, checkpoint by measuring the vertical distance from the midline to the drawn top point and compare it with the actual distance. Continue down the other side to the end point without lifting the tool.

Reason: Slow contour keeps the line continuous while allowing checks. The top-of-lip checkpoint catches vertical drift before the second half is drawn.

Check: Confirm the line has no unintended breaks and that the start and end points match the actual lip edge; verify the top checkpoint distance is close to the actual distance.

Contour Line Drawing of a Conch Shell: Outline and Lip Edge Study

Original tasks 4 / complete keys

Task 4

In a blind-contour box, you draw the outer outline without looking at the paper. The result is distorted. Explain why this is expected and what the exercise trains.

Answer: Blind contour removes visual feedback from the paper, so the hand does not correct the line in real time; distortion is expected. The exercise trains eye-hand coordination and careful observation of the actual edge, not the production of an accurate drawing.

Reason: Without looking, the drawer relies on the perceived edge and hand movement. The purpose is observation training, so accuracy is not the goal.

Check: Confirm the blind-contour box was used without looking at the paper and that the line describes the outer outline only; judge the exercise by process, not by shape accuracy.

Contour Line Drawing of a Conch Shell: Outline and Lip Edge Study

Source rubric / reflection

- [ ] Outer outline is drawn as a continuous line with no unintended breaks.
- [ ] Lip edge is traced as a separate continuous curve and is not confused with the inner spiral.
- [ ] No shading, texture, or spiral construction lines are added.
- [ ] Drawn width-to-height ratio is within about ten percent of the actual ratio.
- [ ] Baseline and midline references are used to check placement.
- [ ] Blind-contour and slow-contour boxes are both used as directed.
- [ ] Valid alternative line styles and hand pressures are accepted if edge relationships remain accurate.

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