Pencil Beach Scene: Shoreline, Waves, and Dune Grass

Original tasks 1, 2, 3 / complete keys

Task 1

A 20 cm wide sheet has a border 1 cm from each edge. The horizon is 5 cm from the top at the left edge and 7 cm from the top at the right edge. Is the horizon level within 2 mm? Show the difference.

Answer: No. The difference is 7 cm minus 5 cm equals 2 cm, which is 20 mm, far more than 2 mm.

Reason: Level check compares the two measured distances. Convert to the same unit: 2 cm equals 20 mm. Since 20 mm is greater than 2 mm, the horizon is not level within the tolerance.

Check: Subtract the smaller measurement from the larger and compare with 2 mm after converting units.

Task 2

A shoreline enters the left border 8 cm from the top and exits the right border 8 cm from the top. The middle point is 0.5 cm from the straight line between them. Is the curve visible under the 1 cm offset convention?

Answer: No. The offset is 0.5 cm, which is less than the 1 cm convention, so the curve is too shallow to read clearly.

Reason: The convention requires a middle-point offset of about 1 cm to make the curve visible. A 0.5 cm offset is half that value, so the shoreline would look nearly straight.

Check: Compare the measured offset with 1 cm; if it is less, increase the offset and redraw.

Task 3

On a sheet where the shoreline-to-horizon distance is 9 cm, a grass clump is drawn 2 cm tall. Does it follow the one-third height convention? Show the arithmetic.

Answer: No. One-third of 9 cm is 3 cm, so a 2 cm clump is shorter than the convention.

Reason: The convention sets clump height at about one-third of the shoreline-to-horizon distance. Divide 9 cm by 3 to get 3 cm. The drawn height of 2 cm is below this target.

Check: Divide the shoreline-to-horizon distance by 3 and compare with the clump height; allow small variation but note large differences.

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Original tasks 4 / complete keys

Task 4

A drawing has wave bands spaced 3 cm apart near the horizon and 1 cm apart near the shore. Does this match the distance convention? Explain.

Answer: Yes. Wider spacing near the horizon and narrower spacing near the shore matches the convention for suggesting distance.

Reason: The convention places wider gaps near the horizon and narrower gaps near the shore. The values 3 cm and 1 cm follow that pattern, so the spacing is consistent with the lesson.

Check: Compare the two spacings: the horizon-side gap should be larger than the shore-side gap.

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Source rubric / reflection

- [ ] Horizon is level within 2 mm at both ends of the composition box.
- [ ] Shoreline is a visible curve with a middle point offset from the straight line between entry and exit.
- [ ] Two or three wave bands are present with wider spacing near the horizon and narrower spacing near the shore.
- [ ] Three to five dune grass clumps appear on the sand side, each following the one-third height convention with varied strokes.
- [ ] Sand and water each show at least two tonal values, with darker foreground sand.
- [ ] Construction lines are light and erasable; no heavy smudging.

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