Ocean Habitat Drawing: Layout Seabed, Reef, and Open-Water Zones

Original tasks 1, 2, 3 / complete keys

Task 1

Paper is 24 cm tall. Bands are 8 cm open water, 8 cm reef, and 8 cm seabed. A student draws a fish mostly in the reef band but its tail crosses into open water. Is the placement acceptable under the convention?

Answer: Yes, if most of the fish body is in the reef band and the reef structure is nearby.

Reason: The convention says an animal must be mostly inside one zone. A tail crossing a boundary does not break the rule if the body is mainly in the reef band.

Check: Trace the fish outline and estimate which band contains most of its area. Confirm the reef structure is in the same band.

Task 2

A student labels the reef band but writes the label across the boundary line into open water. Band heights are 6 cm, 6 cm, and 6 cm on 18 cm paper. What should change?

Answer: Move the reef label fully inside the reef band.

Reason: The convention requires each zone label to sit inside its own zone. A label crossing a boundary fails that check.

Check: Trace the label with a finger and confirm it does not touch either boundary line.

Task 3

A student draws five open-water animals in the top band and no reef animals. The reef band contains only the reef structure. Does the drawing meet the habitat-zone layout goal?

Answer: No. Add reef animals near the reef structure so the reef zone is used.

Reason: The layout goal is a habitat with marine life placed in all three zones. An empty reef zone leaves the habitat incomplete.

Check: Count animals per zone. Confirm at least one animal is mostly inside each labeled zone.

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Original tasks 4 / complete keys

Task 4

Paper is 30 cm tall. A student uses bands of 10 cm, 10 cm, and 10 cm. They draw a seabed animal floating in the middle of the open-water band. What is the fix?

Answer: Move the seabed animal to rest on or just above the bottom boundary.

Reason: Seabed animals belong in the bottom band. Floating in open water breaks the zone logic.

Check: Check the animal position against the bottom boundary and confirm it sits in the seabed band.

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Source rubric / reflection

- [ ] Three zones are drawn and labeled: seabed, reef, open water.
- [ ] Each zone label sits fully inside its own zone.
- [ ] Seabed animals rest on or just above the bottom boundary.
- [ ] Reef animals cluster near the drawn reef structure.
- [ ] Open-water animals sit in the top band with clear space around them.
- [ ] Each animal is mostly inside one zone.
- [ ] Labels are legible; letter style may vary and is accepted if readable.
- [ ] The scene reads as one ocean habitat with three clear zones.

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