

Answer Key: Oceanography Practice Test I - Biology and Chemistry

Section 1: Biology

1. Which organisms form the base of the food chain at hydrothermal vents due to their ability to convert carbon and nutrients into organic matter in the absence of sunlight?

Chemosynthetic Bacteria

2. The habitat of blue whales, tunas and swordfishes is best described as:

d: Pelagic

3. Intensive aquaculture of which of the following organisms has contributed to loss of mangroves around the world?

c: Shrimp

4. Northern elephant seals come ashore during the spring and summer to do what?

d: Molt their fur

5. Lophelia (LO-fee-lee-ua) coral reefs in the North Atlantic are being primarily damaged by:

b: Trawling

6. Seals have a variety of adaptations for deep dives. To avoid nitrogen narcosis, which adaptation is most helpful?

b: Exhaling at the start of the dive and collapsing the lungs

Section 2: Chemistry

1. Together, sodium and chloride alone comprise approximately what percent of the total salts in the ocean?

b: 90

2. Name two sources of molecular oxygen on the surface of the ocean.

1. Transport of oxygen from the atmosphere to the ocean surface across the air-sea interface.
2. Photosynthesis in the photic zone.

3. Which of the following are NOT impacted by the decreasing pH levels in ocean water, termed ocean acidification?

c: Diatom shells

4. What chemical is the principle source of energy at many of Earth's hydrothermal vent systems?

c: Hydrogen Sulfide

5. When traveling down the water column which will dissolve first?

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a: A shell composed of aragonite

6. Which of the following is a characteristic of an estuarine turbidity maximum?

a: Increased flocculation