Foundations of Oceanography

Oceanography · Answer Key · 18 Questions

1. Which layer of the ocean is defined as the transition zone where temperature decreases rapidly with increasing depth?

A) Mixed layer
B) Thermocline
C) Halocline
D) Abyssal zone

2. What is the primary force responsible for generating the majority of surface ocean currents?

A) Coriolis effect
B) Tidal forces
C) Wind
D) Density gradients

3. Which chemical compound is the most abundant dissolved salt in seawater?

A) Magnesium sulfate
B) Calcium carbonate
C) Potassium chloride
D) Sodium chloride

4. What is the average salinity of the world's oceans in parts per thousand (ppt)?

A) 35
B) 25
C) 45
D) 15

5. The 'Great Ocean Conveyor Belt' is formally known as what type of circulation?

A) Surface wind circulation
B) Thermohaline circulation
C) Tidal resonance
D) Eddy diffusion

6. Which geological feature is formed at a divergent plate boundary where new oceanic crust is created?

A) Deep-sea trench
B) Mid-ocean ridge
C) Continental shelf
D) Volcanic island arc

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

7. What is the name of the phenomenon where cold, nutrient-rich water rises from the depths to the surface?

A) Downwelling
B) Upwelling
C) Convergence
D) Turbidity

8. Which zone of the ocean, also known as the twilight zone, receives faint sunlight but not enough for photosynthesis?

A) Euphotic zone
B) Disphotic zone
C) Aphotic zone
D) Bathyal zone

9. What is the primary cause of ocean tides on Earth?

A) Atmospheric pressure variations
B) Gravitational pull of the Moon and Sun
C) Undersea volcanic activity
D) Density differences in water

10. Which of these is the deepest trench in the world's oceans?

A) Tonga Trench
B) Philippine Trench
C) Mariana Trench
D) Kermadec Trench

11. What defines the 'benthic zone' in an ocean ecosystem?

A) The pelagic water column
B) The surface waves
C) The ocean floor
D) The intertidal spray zone

12. Which element, essential for biological life, is most often the limiting nutrient in marine ecosystems?

A) Oxygen
B) Nitrogen
C) Sodium
D) Chlorine

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

13. What is the effect called where moving objects, such as ocean currents, are deflected to the right in the Northern Hemisphere?

A) Ekman spiral
B) Coriolis effect
C) Geostrophic flow
D) Langmuir circulation

14. How does increasing the pressure in the deep ocean affect the solubility of gases in seawater?

A) It decreases solubility
B) It increases solubility
C) It has no effect
D) It converts gas to solid

15. What is the term for the total mass of living organisms in a given area or volume?

A) Ecosystem
B) Biomass
C) Population density
D) Trophic level

16. Which type of sediment is formed by the precipitation of minerals directly from seawater?

A) Lithogenous
B) Biogenous
C) Hydrogenous
D) Cosmogenous

17. What is the average depth of the world's oceans?

A) Approximately 1,000 meters
B) Approximately 3,700 meters
C) Approximately 7,500 meters
D) Approximately 10,000 meters

18. Which process involves the movement of water molecules through a semi-permeable membrane, crucial for regulating marine organism salt balance?

A) Osmosis
B) Diffusion
C) Active transport
D) Capillary action

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.