

Natural Disasters and Environmental Science

Natural Disasters · Answer Key · 20 Questions

1. Which type of natural disaster is most commonly associated with the immediate release of ash that can alter global temperatures by blocking sunlight?

- A) Earthquake
- B) Volcanic eruption**
- C) Hurricane
- D) Wildfire

2. What is the primary way that wildfires can benefit certain forest ecosystems, such as those dominated by lodgepole pines?

- A) By cooling the soil temperature
- B) By releasing seeds from serotinous cones**
- C) By increasing forest density
- D) By preventing new growth

3. Which marine animal is known to sense changes in barometric pressure, often leaving shallow waters before a hurricane hits?

- A) Great White Shark
- B) Green Sea Turtle**
- C) Blue Whale
- D) Clownfish

4. What is the term for the process where intense shaking during an earthquake causes water-saturated soil to behave like a liquid?

- A) Liquefaction**
- B) Subduction
- C) Erosion
- D) Desertification

5. Which natural disaster often results in the mass migration of birds and insects due to the destruction of habitat and food sources?

- A) Tsunami
- B) Drought
- C) Wildfire**
- D) Hailstorm

6. How do mangrove forests help mitigate the impact of a tsunami on coastal environments?

- A) They absorb the heat from the waves
- B) They reduce the velocity of incoming water**
- C) They increase the height of the waves
- D) They release chemicals to solidify the soil

7. Which gas is typically released in the largest quantities during a massive volcanic eruption?

- A) Oxygen
- B) Nitrogen
- C) Water vapor**
- D) Argon

8. During a drought, which physiological adaptation do many desert plants employ to survive?

- A) Rapid shedding of all roots
- B) Increasing leaf surface area
- C) Stomata closure during the day**
- D) Drinking water from deep underground springs

9. What is the main environmental consequence of an oil spill caused by a natural disaster, such as a hurricane hitting an oil rig?

- A) Increased oxygen levels in the water
- B) Disruption of the marine food chain**
- C) Rapid cooling of ocean temperatures
- D) Improved coral reef growth

10. Which of these natural events can lead to the formation of a 'dead zone' in a coastal area due to nutrient runoff?

- A) Flash flooding**
- B) Ice age
- C) Light fog
- D) Low tide

11. What is the primary driver of 'fire whirls' that can occur during large-scale wildfires?

- A) Strong, rotating wind patterns**
- B) High concentrations of carbon dioxide
- C) Sudden cooling of the air
- D) Underwater volcanic activity

12. How do earthworms typically respond to heavy, prolonged rainfall that threatens to flood their burrows?

- A) They hibernate
- B) They surface to avoid drowning**
- C) They release toxins into the soil
- D) They migrate to higher ground

13. Which geological feature is created by the collapse of a volcano after a massive eruption?

- A) Caldera**
- B) Moraine
- C) Delta
- D) Canyon

14. Which animal species is frequently used as a bio-indicator for environmental stress following a wildfire due to their sensitivity to air quality?

- A) Bears
- B) Lizards
- C) Lichens**
- D) Eagles

15. What happens to the salinity of coastal estuaries immediately following a major storm surge?

- A) It stays the same
- B) It increases significantly**
- C) It decreases rapidly
- D) It becomes alkaline

16. What is the term for a fast-moving current of hot gas and volcanic matter that flows away from a volcano during an eruption?

- A) Lava flow
- B) Pyroclastic flow**
- C) Magma chamber
- D) Ash cloud

17. Which of the following is a direct environmental benefit of a river flooding its banks?

- A) Prevention of plant growth
- B) Deposition of nutrient-rich sediment**
- C) Removal of all invasive species
- D) Decrease in water evaporation

18. What do many coral reefs suffer from after a period of prolonged ocean warming associated with climate extremes?

A) Coral bleaching

B) Rapid calcification

C) Increased growth rates

D) Infection by fungi

19. Which phenomenon involves the sliding of land down a slope, often triggered by heavy rain or earthquakes?

A) Avalanche

B) Landslide

C) Tornado

D) Blizzard

20. What is a major cause of the death of aquatic life in a lake after a volcanic eruption nearby?

A) Increased light levels

B) Sudden acidity changes in the water

C) Decrease in water depth

D) Increased fish reproduction