

Ecology Fundamentals

Ecology · Answer Key · 18 Questions

1. In what year was Rachel Carson's influential book "Silent Spring" published, alerting the public to the dangers of pesticides?

- A) 1952
- B) 1962**
- C) 1972
- D) 1982

2. What is the approximate percentage of Earth's surface covered by oceans?

- A) 51%
- B) 61%
- C) 71%**
- D) 81%

3. The concept of 'carrying capacity' in ecology refers to the maximum population size that an environment can sustain indefinitely. Who is often credited with popularizing this term in the context of population studies?

- A) Charles Darwin
- B) Alfred Russel Wallace
- C) Raymond Pearl**
- D) Thomas Malthus

4. Which major international agreement, signed in 1992, aims to combat climate change by reducing greenhouse gas emissions?

- A) Kyoto Protocol
- B) Paris Agreement
- C) Rio Declaration**
- D) Montreal Protocol

5. What year did the Chernobyl nuclear disaster occur, significantly impacting the surrounding ecosystem?

- A) 1985
- B) 1986**
- C) 1987
- D) 1988

6. The Great Barrier Reef, the world's largest coral reef system, is located off the coast of which country?

- A) Indonesia
- B) Philippines
- C) Australia**
- D) Papua New Guinea

7. What is the primary gas that makes up the Earth's atmosphere, accounting for approximately 78%?

- A) Oxygen
- B) Carbon Dioxide
- C) Nitrogen**
- D) Argon

8. Which decade saw the establishment of the U.S. Environmental Protection Agency (EPA)?

- A) 1950s
- B) 1960s
- C) 1970s**
- D) 1980s

9. What is the approximate number of known species on Earth, as estimated by many scientists?

- A) 1.5 million
- B) 8.7 million**
- C) 50 million
- D) 100 million

10. In what year was the first Earth Day celebrated?

- A) 1965
- B) 1970**
- C) 1975
- D) 1980

11. Which scientist is known for their work on trophic levels and energy transfer in ecosystems, often associated with the 10% rule?

- A) Charles Elton**
- B) G. Evelyn Hutchinson
- C) Arthur Tansley
- D) Eugene Odum

12. What is the approximate average global temperature in degrees Celsius (°C)?

- A) 8°C
- B) 12°C
- C) 15°C**
- D) 20°C

13. The term 'biodiversity' was first coined by scientist _____ in 1988.

- A) E.O. Wilson
- B) Thomas Lovejoy
- C) Walter Rosen**
- D) Jane Goodall

14. The Amazon rainforest, the largest tropical rainforest in the world, is primarily located in which continent?

- A) Africa
- B) Asia
- C) South America**
- D) North America

15. What year did the Exxon Valdez oil spill occur, causing significant environmental damage to Prince William Sound?

- A) 1987
- B) 1988
- C) 1989**
- D) 1990

16. What is the term for organisms that produce their own food, usually through photosynthesis?

- A) Consumers
- B) Decomposers
- C) Producers**
- D) Carnivores

17. The Deepwater Horizon oil spill, one of the largest marine oil spills in history, occurred in which year?

- A) 2008
- B) 2009
- C) 2010**
- D) 2011

18. Which gas is a major greenhouse gas responsible for global warming, with its atmospheric concentration significantly increasing since the industrial revolution?

- A) Methane
- B) Nitrous Oxide
- C) Carbon Dioxide**
- D) Ozone