

Name: _____ Date: _____

Old Habits vs. New Horizons: Sustainability Quiz for 9th Grade

Life-cycle analysis, biomimicry, and the triple bottom line—critical frameworks for evaluating how human systems can harmonize with the biosphere's limits.

1. The 'Triple Bottom Line' is a framework used by sustainable businesses to measure success. Which three pillars does it evaluate?

- A. Cost, Revenue, and Market Share
- B. People, Planet, and Profit
- C. Production, Logistics, and Sales
- D. Innovation, Regulation, and Competition

2. True or False: The concept of the 'Circular Economy' aims to design out waste and keep materials in use for as long as possible.

- A. True
- B. False

3. When a product's environmental impact is assessed from the extraction of raw materials to its eventual disposal, it is called a _____ assessment.

- A. Cradle-to-Grave
- B. Point-of-Sale
- C. Upstream-only
- D. Resource-Heavy

4. Which of these is an example of 'biomimicry' in sustainable design?

- A. Building a dam to block a river's natural flow
- B. Using concrete to pave over wetlands for drainage
- C. Designing wind turbine blades based on the fins of humpback whales
- D. Genetically modifying crops to resist all insects

5. True or False: Intergenerational equity refers to the idea that current generations have a moral obligation to leave a healthy planet for future ones.

- A. True
- B. False

6. The maximum population size of a species that an environment can sustain indefinitely without degrading the ecosystem is known as _____.

- A. The Tipping Point
- B. Carrying Capacity
- C. Biological Peak
- D. Exponential Limit

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7. Which of the following describes 'Ecological Debt'?

- A. The amount of money a government owes to green energy companies
- B. Using resources faster than the Earth can regenerate them in a given year
- C. The tax paid by companies that use solar power
- D. The cost of building new national parks

8. Permaculture is a design system that focuses on creating _____ agricultural ecosystems that are self-sufficient and resilient.

- A. Industrialized
- B. Monoculture
- C. Permanent
- D. Chemical-intensive

9. True or False: Sustainability focuses only on the environment and does not consider economic growth or social justice.

- A. True
- B. False

10. Which urban planning concept reduces reliance on cars by ensuring all essential services are within a short walk or bike ride?

- A. Urban Sprawl
- B. The 15-Minute City
- C. Zoned Sequestration
- D. Industrial Decoupling