

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Answer Key: Modified Maps and Marred Meadows: Human Impact Quiz for 7th Grade

Critical analysis of qanat systems, terrace farming, and industrial runoff. Students will synthesize geographic data to evaluate how modification reshapes global ecosystems.

---

**1. The 'Qanat' systems developed in ancient Persia (modern-day Iran) are sophisticated examples of which human-environment interaction?**

**Answer:** A) Adapting to desert climates by utilizing gravity-fed underground tunnels to transport water.

Qanats represent a complex adaptation where humans used deep well systems and underground channels to prevent evaporation while accessing groundwater in arid environments.

**2. The construction of the Great Green Wall in Africa is a human modification intended to reverse the consequences of desertification.**

**Answer:** A) True

The Great Green Wall is a massive ecological modification project aimed at planting trees across the Sahel to combat land degradation and climate change consequences.

**3. The Incan practice of carving steps into the Andes Mountains to create flat land for agriculture is known as \_\_\_\_.**

**Answer:** B) Terrace farming

Terrace farming is a geographic modification that allows for irrigation and prevents soil erosion on steep mountain slopes, vital for the Incan civilization's survival.

**4. The Aral Sea's dramatic shrinkage over the last 50 years serves as a critical geographic case study for which of the following?**

**Answer:** C) The unintended negative consequences of massive environmental modification.

The diversion of the Amu Darya and Syr Darya rivers for irrigation led to the near-disappearance of the Aral Sea, showing how human modification can cause ecological collapse.

**5. Developing 'Seismic Isolators' in modern skyscrapers is a form of human adaptation to tectonic plate movements.**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Answer:** A) True

This is a high-tech adaptation where humans change their building methods to survive the natural conditions of earthquake-prone regions like San Francisco or Tokyo.

**6. The dependency on the 'Monsoon' seasonal winds for agriculture and hydroelectric power is most characteristic of which geographic region?**

**Answer:** B) South Asia

Countries like India and Bangladesh heavily depend on the seasonal monsoon rains for crop yields and power, demonstrating a direct reliance on rhythmic natural cycles.

**7. Which of the following describes a 'Positive Feedback Loop' resulting from human modification of the Arctic environment?**

**Answer:** A) Melting permafrost releases methane, which increases global warming and causes more melting.

In geography, a positive feedback loop accelerates a process. Melting permafrost due to human-induced warming releases gases that cause further warming, a complex consequence of interaction.

**8. The use of 'Chinampas' or floating gardens by the Aztecs is an example of modifying a marshy environment to increase food production.**

**Answer:** A) True

The Aztecs modified the swampy lakebeds of Lake Texcoco by building artificial islands, showcasing their ability to transform a difficult environment into highly productive farmland.

**9. When a city experiences higher temperatures than surrounding rural areas due to concrete and asphalt, it is known as the Urban \_\_\_\_\_ Island effect.**

**Answer:** D) Heat

The Urban Heat Island effect is a consequence of human modification where urban materials trap heat, creating a microclimate different from the natural surroundings.

**10. How does the 'Great Man-Made River' project in Libya illustrate the concept of dependency and modification?**

**Answer:** B) It involves modifying the desert by extracting 'fossil water' from ancient underground aquifers.

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

This project modified the Sahara by building a massive pipe network to tap into non-renewable aquifers, showing human dependency on finite resources to survive in extreme climates.