

Name: _____ Date: _____

Answer Key: The Settlement Secret: A 4th Grade Survival Expedition

Why do some cities thrive while others vanish? Analyze the high-stakes decisions humans make when modifying land and managing scarce resources.

1. In the arid American Southwest, the Ancestral Puebloans built 'canals' to direct rainwater to their crops. This is a primary example of:

Answer: B) Modifying the land to manage water scarcity

By building canals, the Puebloans physically changed the landscape to solve the problem of limited water for farming.

2. True or False: When a city builds a massive sea wall to protect houses from rising tides, they are modifying the environment to reduce risk.

Answer: A) True

Constructing sea walls is a human modification designed to change how the ocean interacts with human settlements.

3. The process of cutting step-like benches into steep mountainsides to create flat land for farming is known as _____.

Answer: B) Terracing

Terracing is a complex modification used by civilizations like the Inca to farm on mountains where flat land doesn't naturally exist.

4. Consider a city like Phoenix, Arizona. Which technology most allowed humans to 'modify' their daily life to survive the extreme summer heat?

Answer: C) Large-scale air conditioning

Air conditioning is a modification of the indoor environment that allows high populations to live comfortably in desert climates.

5. When humans build a dam across a river, they gain electricity, but a negative _____ is that fish migration routes are often blocked.

Answer: C) Consequence

Consequences are the results—both good and bad—that happen when humans change their natural surroundings.

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6. The nomadic Bedouin people of the Arabian Desert move their livestock frequently to find water and grass. This behavior is an example of:

Answer: C) Environmental adaptation

Adaptation involves changing human behavior (moving) to fit the existing conditions of the environment (limited water).

7. True or False: Using wind turbines to create energy is a way humans depend on natural renewable resources.

Answer: A) True

Building turbines shows how humans depend on the natural movement of air to power their modern lives.

8. If a logging company regenerates a forest by planting two trees for every one they cut down, they are attempting to:

Answer: B) Minimize the negative consequences of their modification

Reforestation is a practice used to balance the impact of human use of natural resources.

9. The use of 'Pesticides' in farming helps grow more food, but it can lead to _____ when the chemicals wash into local streams.

Answer: B) Water pollution

Pollution is a common unintended consequence of chemical modifications made to improve crop yields.

10. Mesa Verde National Park features 'cliff dwellings' built into rock alcoves. Why did the inhabitants choose this specific environmental interaction?

Answer: A) To adapt to the need for natural cooling and protection

Building into the cliffs provided natural shade and defense, showing a high-level adaptation to the local geography.