Wild Habitats

Grade 6 Name: _____

Read the passage comparing two habitats. Then answer the questions using evidence from the text.

Compare plant life, animal life, climate, rainfall, and temperature in each habitat. Use text evidence to support every answer.

Arctic Tundra vs Tropical Savanna: Extremes of Earth

The Earth's diverse biomes present fascinating contrasts, none more striking than the **Arctic Tundra** and the **Tropical Savanna**. The tundra, located in Earth's northernmost regions, is defined by extreme cold, dryness, and a permanently frozen layer of soil called permafrost. **In contrast**, tropical savannas, often found near the equator, maintain consistently warm temperatures but are characterized by distinct wet and dry seasons.

These climatic differences are stark. The Arctic Tundra endures average temperatures from -34°C in winter to a brief 12°C in summer, receiving only 150-250 mm of precipitation annually, mostly as snow. **While** the savanna stays warm, typically 20-30°C, it receives far more rainfall, 500-1500 mm per year, concentrated during its wet season, fostering lush grasslands.

Plant life in **both** habitats displays unique adaptations. Tundra plants, like low-growing Arctic willow and caribou moss, survive short growing seasons and frozen soil by staying close to the ground. **Conversely**, the tropical savanna is dominated by tall grasses (e.g., Rhodes grass) and scattered drought-resistant trees like acacia and baobab, which endure long dry spells and frequent fires.

Animal species have evolved specialized strategies. The Arctic Tundra is home to polar bears, Arctic foxes, caribou, and musk oxen, with thick insulation and migratory patterns.

Similarly, the tropical savanna supports vast herds of migrating herbivores such as zebras and wildebeest, alongside predators like lions and cheetahs, **all** adapted to seasonal resource availability and open landscapes.

Despite climatic differences, **both** ecosystems feature complex food webs. The tundra, **while** lower in species diversity, has specialized chains (e.g., lemming-fox-owl). The savanna, **however**, boasts exceptionally high biodiversity, supporting intricate webs from insects to large mammals, with grasses forming the base.

Both habitats face significant threats. The Arctic Tundra experiences rapid warming and permafrost melt, releasing greenhouse gases and endangering species like polar bears; oil extraction also poses risks. **In contrast**, the tropical savanna suffers habitat loss from agriculture, poaching, and desertification. Climate change amplifies issues in **both**, with altered precipitation and increased extreme weather, including intense wildfires in savannas and further ice melt in the tundra.

Policy responses vary. The Arctic Council promotes sustainable development, balancing indigenous rights with resource management. The tundra's economic value includes oil, gas, and traditional hunting, **however**, these often conflict with conservation. Savannas benefit from extensive national parks and ecotourism, generating revenue **while** protecting wildlife. **Unlike** the common assumption, many savanna fires are natural and essential for ecosystem health, a factor in conservation. **Both** habitats are crucial for global ecological balance, from carbon sequestration in the tundra to the vast biodiversity of the savanna.

COMPREHENSION QUESTIONS

(1) Which habitat experiences average temperatures ranging from 20-30°C?

(A) Arctic Tundra (B) Tropical Savanna (C) Both (D) Neither

(2) Which habitat is home to animals like caribou and Arctic foxes?

(A) Arctic Tundra (B) Tropical Savanna (C) Both (D) Neither

(3) "Both habitats support large migrating herds of herbivores." Is this a SIMILARITY or DIFFERENCE?

(A) Similarity (B) Difference

(4) The Arctic Tundra has permafrost, while the Tropical Savanna experiences distinct wet and dry seasons." Is this a SIMILARITY or DIFFERENCE?

(A) Similarity (B) Difference

(5) Use evidence from the passage to explain ONE way these habitats are alike.

(6) Which habitat do you think faces a bigger threat from climate change? Use TWO details from the passage.