

2. Respond to parts A, B, C, D, E, F, G, H, I, and J.

- A.** Based on the information in Figure 1, **identify** the type of plate boundary that runs beneath Serengeti National Park.
- B.** Based on the information provided, **identify** the dominant biome within the Serengeti.
- C.** Wildebeest give birth to their young when new grasses are growing. Based on the information in Figure 2, **identify** the location in the Serengeti where wildebeest are most likely to give birth.
- D.** The Serengeti has two primary types of grasses: long and short. The two grass types provide similar levels of nutrition for animals. Wildebeest primarily consume long grasses, while other herbivores such as gazelle consume the short grasses. These two similar species coexist in Serengeti National Park.

Explain why resource partitioning allows for the coexistence of the wildebeest and the gazelle in the Serengeti.

- E.** The Tanzanian government plans to build a highway across the northern portion of the Serengeti, as shown in Figure 2.

Describe one way the planned highway shown in Figure 2 could negatively affect the wildebeest population in the Serengeti.

- F. Propose** a solution to the negative effect created by the planned highway described in part E.
- G.** Many organisms live in grasslands. One weed species, the spotted knapweed, was introduced at one location in North America in the 1890s and is currently found throughout the rangelands of the western United States. The spotted knapweed poses several environmental problems in North America. Farmers often use crop rotation to control populations of pests like the spotted knapweed. A more traditional method of controlling pests involves spraying pesticides.

Describe a characteristic of an invasive species, such as the spotted knapweed, that allows them to outcompete native species.

- H. Justify** the use of crop rotation as an environmental solution by providing an additional advantage, other than controlling pest populations.
- I. Describe** an environmental problem associated with controlling pest populations with large amounts of pesticide.
- J. Propose** a solution to controlling pests, other than pesticides or crop rotation.