

Name \_\_\_\_\_

Date \_\_\_\_\_

## Mountain Gorillas of Virunga National Park Answer Key

In 1925, Virunga National Park, Africa's first national park was established with the primary purpose of protecting the mountain gorillas (*Gorilla beringei beringei*) living along the Virunga Mountains of central Africa. Today, mountain gorillas are critically endangered. Only about 700 individuals remain in the wild and nearly one quarter live within the boundaries of Virunga National Park.

Mountain gorillas represent a subspecies of the eastern gorilla (*Gorilla beringei*). The mountain gorillas are larger than their lowland cousins, have shorter arms, and longer hair. Mountain gorillas are a social species and can be found eating, nesting, and traveling in troops of up to 30 individuals. Mountain gorilla territories range from 2 to 40 square kilometers (.77 to 15 square miles). They are usually found in areas of thick ground vegetation with relatively little canopy cover at elevations of 1,500 to 4,000 meters (4,921 to 13,123 feet). Mountain gorillas are omnivores, but the majority of their diet is plant based. They eat the roots and shoots of plants, as well as fruits and wild celery. They will also eat tree bark and wood pulp.

Mountain gorillas live an average of 35 years in the wild, but they are constantly threatened by human activity in and around the national park. Poaching, encroaching human populations, and violent conflicts in the area continue to affect mountain gorilla populations. Habitat loss is another threat to mountain gorillas. Inside and around Virunga National Park, humans are converting wild habitat to agricultural land and areas for livestock. Trees are also illegally cut down and then burned to produce charcoal. The demand for charcoal is high since it is used for heating and cooking, which has led to widespread logging. Protecting Virunga National Park from destructive human activities is critical to the conservation of mountain gorillas and their habitat.

Use the information above and your knowledge of vegetation zone characteristics to determine which areas of Virunga National Park are inhabited by mountain gorillas.

1. Considering the dietary and habitat requirements of mountain gorillas, which of the three locations that you analyzed using the Virunga National Park map is the likely habitat of mountain gorillas? Provide evidence to support your claim.

Location 3 is the likely habitat of mountain gorillas. Location 3 represents montane forest, which contains dense vegetation that would provide roots, shoots, and fruits for mountain gorillas to eat. Also, montane forest is found within the elevation boundaries of mountain gorillas.

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## Mountain Gorillas of Virunga National Park

### Answer Key, continued

2. For the next set of questions, use the Map of Vegetation Types of Greater Virunga Landscape. The same three locations indicated in the MapMaker Virunga National Park map are shown on this map for your reference.

The mountain gorillas are located in the Gorilla Sector which is outlined in yellow. This area along the flanks of Mount Mikeno (also known as Volcan Mweno), a dormant volcano, is home to at least three groups of mountain gorillas.

Evaluate the map and use it to answer the following questions.

- a. Identify Mount Mikeno on the map. What type of vegetation is found around Mount Mikeno?

Montane forest is found around Mount Mikeno.

- b. Where else within Virunga National Park can this vegetation zone be found?

Montane forest can also be found in the northern section of the park surrounding the alpine vegetation zone of Location 1, as well as east of the Gorilla Sector.

- c. Even though there is similar vegetation in other areas of the park, mountain gorillas are only found in the Gorilla Sector surrounding Mount Mikeno. Propose at least two reasons why mountain gorillas are not found in the same vegetation zones elsewhere in the park.

Possible answers: 1) The abiotic factors of the area may represent the extremes of the vegetation zone (e.g., lowest temperature or highest elevation) and may not provide a suitable habitat for mountain gorillas. 2) Competition for resources (e.g., food or space) with other animals may prevent them from inhabiting the vegetation zone. 3) Mountain gorillas may have inhabited similar vegetation zones beyond the flanks of Mount Mikeno in the past, but they may have been pushed out of the area or killed as a result of human activity (e.g., poaching, violent conflict, illegal logging, or conversion of montane forest to agricultural land).