A Teacher's Resource Guide to

MOUNTAIN GORILLA

A National Geographic IMAX® Experience

A collection of activities and discussion topics for educators and students

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Staff for this Guide

Julie Vosburgh Agnone, Editor and Project Manager
Jeff Malter and Lisa Freedman Malter, Writers
Susan Wilder Neuhaus, Designer and Illustrator
David Neuhaus, Illustrator

Educational Consultants

Judith D. Brown, The Owl School, Washington, D. C.
Peter L. Munroe, Potomac School, McLean, Virginia
Ailene K. Rogers, National Cathedral School, Washington, D. C.
Steven Weinberg, Windsor Public Schools, Windsor, Connecticut
David S. Wood, Sidwell Friends School, Washington, D. C.

Scientific Consultants

Craig R. Sholley, Former Director, Mountain Gorilla Project, Washington, D. C.
Lisa M. Stevens, Collection Manager, Mammal Department, National Zoological Park, Washington, D. C.

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MOUNTAIN GORILLA

Dear Educator:

Welcome to the fascinating world of the mountain gorilla. The plight of this vanishing species and the environmental problems all endangered animals face are among today's most important issues. The first step toward solving these problems is awareness and education. For this reason, Imax Corporation, in association with the National Geographic Society, is proud to present this resource guide for use in conjunction with the IMAX film Mountain Gorilla.

Since many teachers enjoy taking their classes to the IMAX films as part of their school program, we have developed this teacher's guide to help you prepare your students to view the film and follow up with related discussion and activity ideas. The guide is intended to serve a variety of functions, both in and out of the classroom. It can be used to supplement elementary and middle school courses in the life and environmental sciences or it can be easily incorporated into other disciplines such as geography, anthropology, art, creative writing, psychology, and social studies. The information presented has been flexibly designed for maximum adaptability, and we encourage you to modify the material to suit your individual curriculum needs.

We hope that this information will enrich your viewing experience of Mountain Gorilla. As your students gain greater awareness about the need to respect animals and care for the environment, they will also gain important insights that will equip them to make responsible environmental decisions. Only through genuine appreciation of the unique beauty of all creatures on our planet can we begin to take steps to ensure their survival for future generations.

Sincerely yours,

Sue Mander

Sue Mander
Film Promotion Development
Imax Corporation

SYNOPSIS OF THE FILM

Mountain Gorilla is the first film produced by the Natural History Film Unit of Imax Corporation for the worldwide network of IMAX and OMNIMAX theaters. Mountain Gorilla Productions Ltd, a subsidiary of Imax Corporation, has produced the film in association with the National Geographic Society.

The serious plight of the mountain gorilla makes it a dramatic subject for an engrossing film, especially to audiences interested in wildlife, conservation, and the environment. The large-screen IMAX format brings viewers close to wild creatures that few of us would otherwise have the chance to see. For the first time, viewers will observe gorillas in their natural habitat and watch, as the scientists do, their intricate social behavior. Scientists believe that much can be learned from studies of primate behavior, which is surprisingly similar to that of humans. The film combines breathtaking photography with an evocative musical soundtrack, informative narration, and the unique sounds of mountain gorillas in their natural habitat to create the sensation of actually sitting among these fascinating animals in the rain forest of central Africa's Virunga Mountains.

Mountain Gorilla focuses on the daily life of one group of gorillas living in the Volcano National Park in Rwanda. The family focus of the film makes it particularly appealing to young audiences, in school groups or with their families. Young and old alike will appreciate this rare glimpse of these endangered animals. Viewers will be amused by the young gorillas' antics and touched by the tenderness with which mothers care for their infants. Tension mounts in a scene in which the gorilla group banishes an aggressive young adult male who has acted out in an effort to gain attention. Witnessing the behavior of gorillas, so similar to that of humans in many ways, deepens our understanding of these endangered animals.

PRE-SCREENING DISCUSSION AND ACTIVITY IDEAS

The following suggestions for activities and discussion topics will heighten student interest in the film and increase awareness of concepts that will be reinforced in later activities.

◆ Ask students to make a list of gorilla facts they already know. Then review with the class the gorilla facts listed on the following pages. Divide the class into small groups and have each group research and report on a different gorilla fact category.

◆ List some of the equipment and procedures that scientists use when they study wildlife in their natural habitat.

◆ Discuss the meaning and purpose of the Endangered Species Act with the class and obtain a copy of the U. S. Fish and Wildlife Service's List of Endangered and Threatened Wildlife and Plants. If your library does not have a copy, you can write to the address listed later in this guide. Also discuss the number of species that are endangered worldwide.

◆ Show the class a map of the world's rain forests and discuss the climate, conditions, and wildlife found in a rain forest. Discuss montane and lowland rain forests.

GORILLA FACTS IN BRIEF

Name: Poppy
Favorite Hangout: The rain forest in central Africa's Virunga Mountains
Favorite Activity: Foraging for food
Life Expectancy: About 35 to 40 years
Status: Endangered

HISTORY

◆ The mountain gorilla was first documented historically in 1902 by Oscar von Beringe, a German army captain who was on a military mission in the Virunga Mountains of central Africa. He described the animals as "large, black, and manlike."

◆ In 1921, American naturalist Carl Akeley was sent to the Virunga Mountains to collect specimens for a museum exhibit. He shot and killed five gorillas, but changed his mind about hunting them and soon became instrumental in establishing Africa's first gorilla sanctuary.

◆ In 1959, George Schaller spent a year observing gorilla behavior. His book *The Mountain Gorilla: Ecology and Behavior,* became the bible for future gorilla research. Since then, a number of scientists have studied mountain gorillas, including Dian Fossey, who established a research center known as Karisoke and devoted her life to gorilla research. Fossey's work at Karisoke was documented in the motion picture *Gorillas in the Mist.*

CLASSIFICATION

◆ Gorillas are vertebrates.

◆ Gorillas are mammals.

◆ Gorillas are in the primate order.

◆ Gorillas are in the Pongidae family, which includes chimpanzees, orangutans, and bonobos.

◆ The scientific name of the gorilla, or Genus and species, is *Gorilla gorilla.*

◆ There is only one gorilla species.

◆ The gorilla species is divided into three subspecies. They are: *Gorilla gorilla gorilla* (western lowland gorilla); *Gorilla gorilla graueri* (eastern lowland gorilla); and *Gorilla gorilla beringei* (mountain gorilla).

PHYSICAL DESCRIPTION

◆ The gorilla is the largest living primate. A male gorilla can stretch his arms about two meters (seven feet) wide.

◆ Adult gorillas weigh about 68 to 181 kilograms (150 to 400 pounds). Male gorillas generally weigh about twice as much as females.

◆ Gorillas have black skin and hair.

◆ An adult male gorilla has gray or silver hairs on his back and is often called a silverback. A silverback usually is the dominant member of the group.

◆ The adult male gorilla has a bony crest at the top of its skull.

◆ Mountain gorillas are physically different from lowland gorillas. Mountain gorillas have longer and silkier hair, a different nose shape, and other skeletal differences.

◆ Like other apes, gorillas have no tail. Apes are large, tailless, semi-erect primates, also known as anthropoids.

BEHAVIOR

◆ Gorillas live in small groups that consist of a silverback, three to eight females, and a number of infants, juveniles, and young adult males.

◆ Gorillas are very social animals. They spend a lot of time in bonding behavior, such as playing or grooming.

◆ Contrary to popular myths, gorillas are not fierce animals. They are generally shy and nonaggressive.

◆ A gorilla usually walks on all fours, supporting most of its weight on its feet and walking on its large front knuckles.

◆ The gorilla is a diurnal animal—that is, it is active during the day and rests at night.

◆ Gorillas can climb, but adults usually stay on the ground. Females and young gorillas spend more time in trees than do the males.

◆ Gorillas make new nests each night, sleeping either on the ground or in a tree.

◆ Communication among gorillas is by a variety of grunts, howls, hoots, and barks. They make nearly 20 different vocalizations, and each vocalization has its own meaning.

◆ Gorillas pound on their chests or on the ground to scare off intruders or to show power.

FEEDING

◆ Gorillas are mainly herbivores. They feed on bamboo and tree bark, and the leaves, roots, flowers, and fruit of other plants. Occasionally, gorillas eat grubs and other insects, as well.

◆ Gorillas have 32 teeth, just as humans do.

◆ Most of a gorilla's daytime activity is spent foraging for food and eating.

REPRODUCTION AND EARLY YEARS

◆ Gorillas do not have a specific breeding season.

◆ The period of gestation is about 8.5 to 9 months.

◆ A female gorilla can become a mother for the first time when she is about nine or ten years old.

◆ Usually only one gorilla is born at a time.

◆ Female gorillas generally have a baby about every four to five years and can reproduce into their 30s.

◆ Newborn baby gorillas are totally dependent upon their mothers for survival.

◆ For the first six months of life, an infant gorilla will cling to its mother's body.

◆ For the first two years, aside from when it is playing with other young gorillas, a baby gorilla rides on its mother's back.

◆ Young gorillas feed upon their mother's milk for two to four years.

◆ Gorillas reach maturity when they are between the ages of eight and eleven years old.

"Probably no animal has fired the imagination of man to the same extent as has the gorilla..."

George Schaller
Zoologist
Wildlife Conservation International

GORILLA FACTS IN BRIEF (Continued)

"The future of the mountain gorilla is contingent upon the whims of mankind"

Craig R. Sholley
Former Director
Mountain Gorilla Project

Name: Ubumwe
Age: Nine months
Enjoys: Playing with friends and exploring the rain forest. Here, Ubumwe checks out a wild banana.
Future: Uncertain

HABITAT AND RANGE

◆ Gorillas are native only to the continent of Africa.

◆ The lowland gorilla is found in the dense forests of west-central Africa. The mountain gorilla makes its home in the rain forests of east-central Africa.

LIFE EXPECTANCY AND STATUS

◆ The average life expectancy of a gorilla is about 35-40 years. In captivity, a gorilla has lived past age 50.

◆ There are fewer than 40,000 gorillas left in the wild. Most of these are western lowland gorillas.

◆ Mountain gorillas are limited in their geographic range and are more endangered than lowland gorillas. It is impossible to know for sure, but scientists estimate that fewer than 400 mountain gorillas survive.

◆ There are about 600 gorillas living in captivity, mostly in zoos. Most gorillas that live in zoos are western lowland gorillas. There are no mountain gorillas living in captivity.

◆ The gorilla is an endangered species. Gorillas are protected by law and it is illegal to remove them from their native habitat. However, poachers still hunt them illegally.

◆ In 1925, the Albert National Park, Africa's oldest national park, was established to protect gorillas in the Virunga Mountains.

◆ Today, mountain gorillas live protected in the same region, which has been divided into three adjacent national parks in three different African countries. In Rwanda they live in the Volcano National Park; in Zaire they live in Virunga National Park; and in Uganda they live in the M'Gahinga National Forest and the Bwindi National Forest. The actual size of the parks has been decreasing due to encroachment, both legal and illegal, by human populations.

◆ Between 1955 and 1970, the government of Rwanda reduced the Volcano National Park by 40 percent to provide more land for cultivation.

◆ In 1978, the Mountain Gorilla Project was founded to help protect the mountain gorilla from further population loss. Since 1979, no land has been lost as a result of encroachment. However, despite their protected status and park protection, the fate of mountain gorillas is still uncertain.

◆ The Mountain Gorilla Project turned administrative responsibility for the Volcano National Park over to the Rwandan national government in 1990.

Use the reproducible on the next page after your students have seen the IMAX film *Mountain Gorilla.*

Name _____

You are on an expedition to the Virunga Mountains in central Africa. Your mission is to study the behavior of a small group of mountain gorillas. Use the space below to make notes about your observations of gorillas. Be alert for every detail. Your work may help save these endangered animals!

GORILLA WATCHER

PHYSICAL DESCRIPTION
(Include traits such as estimated height and weight, facial features, and outer covering.)

ACTIVITIES
(Include daily activities, behaviors, movements, and feeding habits.)

SOCIAL INTERACTION
(Include family relationships, bonding behavior, and group dynamics.)

COMMUNICATION
(Include vocalizations, expressions, and gestures.)

If you would like to make a sketch of your observations, please do so on the back of this page.

MOUNTAIN GORILLA

UNIT ONE:
LIFE ON EARTH

BACKGROUND INFORMATION

Unique in the solar system, our planet supports a wondrous multitude of specialized life-forms. Scientists believe that life on Earth began several billion years ago and continues to evolve into the present. Over time, millions of species have evolved in Earth's major biomes.

By understanding the complex interactions within the various ecosystems on our planet, students will gain a greater appreciation for the fragility of life on Earth. The stability and survival of an ecosystem depends upon the unique diversity and interaction of plants and animals that live there. Competition and cooperation for limited natural resources have created an interdependence among all living things—from single-celled organisms that provide oxygen for the biosphere to complex primates, such as mountain gorillas and humans. If the web of life is upset, a species could become endangered. The serious decline or elimination of a species may threaten others, upsetting life's fragile balance and resulting, at worst, in a downward spiral of extinction.

Throughout the history of life on Earth, some organisms became numerous and then died out. Scientists who study the process of natural selection look for the clues that determine the fates of living beings and their habitats. For some species, extinction occurred as a gradual process caused over time by forces of nature. But for others, extinction has been hastened by human factors. The mountain gorilla, which may never have had a large population, is but one example of a species whose existence hangs in the balance between survival and extinction.

KEY CONCEPTS

Listed below are important life-science concepts, many of which will be reinforced by observations in the *Mountain Gorilla* film:

◆ Plants, human beings, and other animals are part of interrelated communities of living things.

◆ Earth's major biomes are: tropical rain forest, deciduous forest, coniferous forest, grassland, desert, tundra, marine, and freshwater.

◆ Different organisms are found in different environments. For example, mountain gorillas are native to the mountain rain forest, camels thrive in the desert, and whales inhabit a marine environment.

◆ Some animals, such as mountain gorillas, survive only in a specific habitat. Other animals, such as pigeons, squirrels, and rats, are more widely distributed.

◆ Animals have structural and behavioral adaptations that enable them to survive in their specialized environments.

◆ Animals produce young that are alike in most ways but which are different enough to be individuals.

◆ A well-balanced community of organisms includes animals, plants, and decomposers. The animals are herbivores, carnivores, and omnivores.

ACTIVITY IDEAS

The following activities are intended to provide a selection of ideas for various age levels. Please adapt the activities to your specific needs.

◆ Assign students to cut out pictures from old magazines and make posters illustrating the food webs for organisms in a tropical rain forest, a desert, and an aquatic biome. Display the posters in the classroom.

◆ Review the physical characteristics of each biome. Ask students to make a chart listing the dominant plants and animals that are found in each. Then have the class locate the different biomes on a world map.

◆ After careful study of the behavior and social organization of the mountain gorilla, have the class write and perform a skit based on life in a gorilla group. The plot might be what happens when the group is threatened. How might the gorillas respond? Only gorilla vocalizations and gestures may be used.

◆ Take a survey of the physical characteristics of the class. Eye and hair color, handedness, free ear lobes, length of the foot, and tongue rolling are easily observed. Point out how individuals are different yet alike in many ways. Is the same true for gorillas? Discuss individual differences that were shown in the film.

◆ Have the class use library resources to find out the herbivore food preferences of gorillas. Next, ask the students to look up the food sources of a carnivore and an omnivore. Have the students make drawings on paper plates or on poster paper to illustrate the three different types of diets.

DISCUSSION QUESTIONS

◆ If you were a scientist, what aspect of living organisms and their environment would you want to study? What training and equipment would you need to accomplish your goals?

◆ What motivates naturalists such as George Schaller, Dian Fossey, Jane Goodall, and Carl Akeley? What personal qualities did they have that made them great naturalists and conservationists?

◆ Compare the past and present distribution of an endangered animal that was once abundant. Why was the animal formerly common and how did it become scarce? Why does it still survive in its present range?

◆ Why are organisms becoming extinct at a faster rate than in the past?

◆ How might the extinction of one species affect many other species?

◆ In what ways do people compete with other organisms for natural resources and places to live? Who usually wins? Why?

◆ Why should we bother to save animals from extinction?

◆ What are some of the characteristics that make each biome unique?

◆ How do biomes differ in their diversity of species and in the physical conditions of their environments?

◆ In what ways are you dependent upon resources from a tropical rain forest? A desert? A water biome? Your own biome?

◆ What is the difference between an animal's habitat and its niche? Discuss this in terms of the "address" and the "profession" of an animal.

◆ Why are some species more likely to become extinct than others?

VOCABULARY BUILDER

adapt: to adjust to a particular environment or habitat. Species adapt to their environments through natural selection over many generations.

biome: a group of ecosystems with similar climates and life-forms.

biosphere: the part of the Earth and its atmosphere where life is found.

carnivore: an animal that primarily eats other animals. Dogs, cats, lions, wolves, eagles, sharks, and spiders are carnivores.

ecology: a branch of biology that studies how living things relate to their environment and to each other.

ecosystems: natural systems in which groups of living organisms interact with each other and their physical environment.

food chain: the transfer of energy between the organisms in an ecosystem. For example, plants make their own food and are eaten by plant-eating animals. These animals are consumed by other animals.

food web: the interacting food chains in an ecological community.

habitat: the place where an animal or plant naturally lives, such as a forest, grassland, or swamp.

herbivore: an animal that feeds mainly on plants. Cows, goats, leaf-cutter ants, ducks, and snails are herbivores.

mammals: warm-blooded animals with backbones. Mammals have fur or hair, and female mammals have milk glands to feed their young. Humans, gorillas, cows, dogs, and whales are all mammals.

natural selection: the process by which living organisms that are most suited to their environment tend to survive, reproduce, and pass on favorable traits to their offspring.

niche: the role of an organism in an ecological community, including its way of life and its effect on the environment.

omnivore: an animal that eats both plant and animal food. Bears, humans, raccoons, crows, and crabs are examples of omnivores.

organism: a complete living thing.

predator: an animal that lives by killing other animals for food. Wolves, lions, praying mantises, and jellyfish are predators.

primate: a member of a particular order of mammals. Primates have a highly developed brain, stereoscopic vision with eyes that face forward, five digits on each limb, and four types of teeth. Humans, apes, and monkeys are primates.

ANSWERS TO "WORD SCRAMBLE" ACTIVITY SHEET ON PAGE 11:

PART ONE: 1. niche; 2. mammal; 3. biosphere; 4. primate; 5. ecosystem; 6. food chain; 7. herbivore; 8. natural selection; 9. predator; 10. omnivore.

PART TWO: a. niche; b. herbivore; c. primates; d. ecosystem; e. natural selection; f. biosphere; g. predator; h. mammals; i. food chain; j. omnivore.

Name _____

WORD SCRAMBLE!!

This activity won't scramble your brain! But it will help you remember some of the terms related to life on Earth. Unscramble the letters to spell a word or phrase in PART ONE. Then place the words in the correct sentences in PART TWO.

PART ONE

1. cehin _____
2. mamlam _____
3. reephiobs _____
4. tearmip _____
5. smeetscoy _____
6. doof ichna _____
7. brovirehe _____
8. raltuna tilseecon _____
9. orptarde _____
10. moovrine _____

PART TWO

a. The role that an organism plays in its ecological community is its _____.

b. An _____ is an organism that eats primarily plants.

c. _____ have eyes that face forward, four types of teeth, and five digits on each limb.

d. A natural system in which the organisms interact with each other and their physical environment is called an _____.

e. The process by which organisms that are most suited to their environment tend to survive, reproduce, and pass on favorable traits is called _____.

f. The _____ is the part of the Earth where all living things are found.

g. An organism that kills other animals for food is called a _____.

h. Warm-blooded animals that have mammary glands and hair or fur are called _____.

i. The transfer of energy in an ecosystem is known as the _____.

j. An animal that eats other animals and plants is an _____.

MOUNTAIN GORILLA

UNIT TWO:
THE EARTH WE SHARE

BACKGROUND INFORMATION

Throughout history, human beings have made use of natural resources, both living and nonliving, to ensure their own survival. However, often without fully understanding the consequences of our actions, humans have created serious problems, sometimes wiping out entire species. For example, the dodo and the passenger pigeon, once plentiful, were hunted to extinction. The bison of the North American plains, its numbers dwindling to about 500 in 1889, might have met the same fate had conservationists not taken action. Land was set aside and funds were provided to maintain this land and the bison returned from the brink of extinction.

Like the bison, the number of surviving mountain gorillas is now below 400. Until very recently, gorillas, too, were hunted for food. Parts of their bodies were sold as ornaments, and their internal organs were used for medicinal purposes. Now, although laws protect gorillas from hunters, illegal hunting persists, and their habitat is being decimated to provide agricultural land for the increasing human population of central Africa.

The destruction of habitat is now considered the most crucial threat to the survival of millions of species worldwide. As we enter the 21st century, some scientists estimate the rate of extinction may approach 20 or more species per hour, up from the current rate of 50 per day. Problems of overpopulation, war, pollution, and long-term alteration of our atmosphere are permanently changing our planet. The survival of the mountain gorilla, the rain forests, and perhaps even humans will ultimately depend on the actions we take to preserve the Earth we share.

KEY CONCEPTS

Listed below are important life-science concepts, many of which will be reinforced by observations in the *Mountain Gorilla* film:

- Extinction is a natural process that has occurred throughout Earth's history.
- Many species of plants and animals have become extinct during human history, and many more may become extinct in the near future.
- Today, organisms are becoming extinct at a faster rate than ever before, primarily because of human activities.
- There are many different threats to wildlife today. Habitat destruction, overhunting, and pollution are major causes of extinction.
- Plants and animals that live in a particular and limited habitat (gorillas, for example) are in the greatest danger of extinction.
- Rain forests—home to at least half of Earth's species—are being destroyed at a remarkable rate.
- When one species becomes endangered or extinct, others will be affected.
- It is possible for a species to return from the brink of extinction, but the chances for the survival of a species increase when people take conservation steps before the population has decreased dramatically.

ACTIVITY IDEAS

The following activities are intended to provide a selection of ideas for various age levels. Please adapt the activities to your specific needs.

◆ Assign students to research and report on animals or plants that are endangered or that have become extinct. Ask the students to make a poster to illustrate the organism, its habitat, its distribution, and how it became endangered or extinct.

◆ Hand out graph paper and ask the class to make a graph of the number of known extinctions per year since 1900. This information can be gathered from encyclopedias and books about extinction and endangered species. Point out how the rate of extinction accelerates as we get closer to the present.

◆ Review possible causes of extinction throughout time. Ask the students to categorize them as either natural or human causes of extinction.

◆ On the blackboard, make a list of animals or plants that have been saved from the threat of extinction and describe what was done to ensure their survival.

◆ Many developing countries, especially in Africa, are experiencing a rapidly increasing human population, which has caused enormous destruction of wildlife habitat. Have the class correlate factors such as per capita income, population density, infant mortality rate, and level of industrialization. Are there any trends? Can you explain the trends? Contrast this with what has happened in North America over the past 100 years.

◆ Animals such as the mountain gorilla are particularly vulnerable to habitat destruction. Ask students to research the life history of the mountain gorilla or another endangered species, paying special attention to the animal's habitat needs. Then have each person share his or her information with the class.

DISCUSSION QUESTIONS

◆ Could the dodo or the passenger pigeon have been saved from extinction? What could have been done to prevent these birds from becoming extinct?

◆ What role might zoos, botanic gardens, and wildlife sanctuaries play in saving endangered species?

◆ What biome is in the greatest danger of being destroyed by human activity? Discuss the causes of this destruction.

◆ How does each one of us contribute to the deterioration of the environment?

◆ Why should we save primates if they are of relatively little economic importance to humankind?

◆ What endangered species would you miss or not miss if it should become extinct in the near future?

◆ Which is more important to save from extinction—a mammal, a plant, or an insect? If you had only enough resources to save a few species, what criteria would you use in deciding which species you would try to prevent from becoming extinct?

◆ Is it possible to provide food for the world's growing human population and save habitats at the same time?

◆ As an introduction to the mapping activity sheet that follows this section, discuss why different maps of Africa may show inconsistencies in place-names and political boundaries. How might political issues in Africa affect the future survival of the mountain gorilla?

CREATIVE WRITING IDEAS

◆ Students can be assigned to compose stories or a play based on the themes of extinction, habitat destruction, and solutions to preventing these events from happening. Ask the class to write their stories as works of fiction, using scientific information as the foundation for describing the setting and action. The setting can be past, present, or future. Students can include fictional characters, both animals and people, in the plot.

◆ Although scientists still do not know for certain what caused the dinosaurs to become extinct, many theories have been proposed to explain their disappearance. Read books and magazine articles about dinosaurs and then write a fictional story based on the theory that you find most interesting.

VOCABULARY BUILDER

deforestation: the practice of cutting down and clearing forested areas for agricultural or other purposes.

endangered species: a group of animals or plants that is in serious danger of becoming extinct.

extinct: no longer in existence.

natural resources: materials obtained directly from nature that are needed or desired by people to maintain their existence. Water, plants, animals, and minerals are natural resources.

overpopulation: an increase in population beyond the ability of an area to adequately provide for its needs.

poachers: people who illegally hunt or fish or remove anything from an area that is protected by law.

pollution: the contamination of the environment by harmful or unwanted substances.

rain forest: a tall, dense forest that grows in a rainy region. Rain forests can occur in temperate areas, but nearly all rain forests lie in tropical zones between the Tropic of Cancer and the Tropic of Capricorn.

rate of extinction: the number of species that become extinct during a given period of time.

renewable resource: a natural resource that can be used more than once or that can be replenished.

threatened species: species whose populations have not yet been reduced in numbers enough to be classified as endangered by the Endangered Species Act, but that still face serious threats to their survival.

ANSWERS FOR "TWENTY QUESTIONS" ACTIVITY SHEET ON PAGE 15:

1. Atlantic Ocean; 2. Indian Ocean; 3. Sudan; 4. Gambia; 5. Cairo; 6. Mediterranean Sea; 7. Red Sea; 8. Lake Victoria; 9. Cape Agulhas; 10. Sahara Desert; 11. Kilimanjaro; 12. Madagascar; 13. Egypt; 14. the Canary Islands, which belong to Spain; 15-17 Rwanda, Uganda, and Zaire; 18. Nile; 19. Virunga Mountains; 20. Equator.

Name _____

20 QUESTIONS

This map activity will help you locate places in and around Africa to gain a better understanding of where gorillas live. Use a map or atlas to help you answer the 20 questions. List your answers on a separate sheet of paper. Then place the corresponding numbers on the map. For extra credit, challenge yourself to learn the names of all of the countries on the African continent. Have fun on your geographic journey!

1. What is the name of the ocean west of Africa?

2. What ocean lies to the east of Africa?

3. What is the largest country in Africa?

4. What is the smallest country in Africa?

5. What city in Africa has the largest population?

6. Africa is bordered on the north by what sea?

7. What sea separates Africa and Saudi Arabia?

8. What is the largest lake in Africa?

9. Where is the southernmost point in Africa?

10. What is the name of largest desert in Africa?

11. What is the name of the tallest mountain in Africa?

12. What is the name of the largest island off the coast of Africa?

13. Where are the Great Pyramids located?

14. What are the small islands off the northwest coast of Africa?

15. What is one of three nations where mountain gorillas live?

16. What is the second nation where mountain gorillas live?

17. What is the third nation in which mountain gorillas live?

18. What is the longest river in Africa? (Draw it on the map.)

19. What is the name of the mountain chain that is home to the mountain gorilla?

20. What is the name of the imaginary line that encircles the earth halfway between the North and South Poles? (Draw it on the map.)

MOUNTAIN GORILLA

UNIT THREE:
WE CAN MAKE A DIFFERENCE

BACKGROUND INFORMATION

Our planet is undergoing great change. As the land, sea, and air are becoming increasingly polluted, the quality of life for all of Earth's inhabitants is deteriorating. Large natural areas are being destroyed and replaced by farms, housing developments, and landfills. Many people feel helpless in the face of such massive devastation of our planet's wilderness areas. What can be done to improve our quality of life? What can be done to ensure that there will be life on Earth that future generations can enjoy? The answers lie in each and every one of us. We *can* make a difference.

Anything we do, however small, can help. Every step we take toward caring for our planet, protecting plants and animals, and correcting human carelessness can add up to real and lasting change. The needs of the human population must be met, so finding the balance will be a challenge. But there is much we can do that can become a part of our everyday life. By participating in recycling programs, preserving habitats, reducing pollution, and increasing our use of renewable energy forms, we can contribute toward a healthier future for every living being on planet Earth. We must take action. We *will* make a difference.

KEY CONCEPTS

Listed below are important life-science concepts, many of which will be reinforced by observations in the *Mountain Gorilla* film:

- Preserving natural habitats is an important way to save endangered species and prevent other species from becoming endangered.
- In zoos and in other habitats made by humans, endangered animals can live and reproduce in safety.
- Reintroduction programs can help reestablish populations of endangered animals to their former homes.
- Preservation of wildlife and their habitats depends upon the concern and actions of human beings.
- Everyone can become involved in activities that will help preserve Earth's environment.
- Conservation programs can help us learn how to protect and use the resources of our planet wisely.
- We can help preserve natural areas by observing laws and becoming better educated about conservation issues.
- Recycling programs—both mandatory and voluntary—are making a real difference in many areas.

ACTIVITY IDEAS

The following activities are intended to provide a selection of ideas for various age levels. Please adapt the activities to your specific needs.

◆ Have students create a terrarium using easily available materials, such as a glass jar, some potting soil, and seeds. Students can use local plants and small invertebrates, such as snails. Have the class keep a record of all the changes they observe in their mini-habitat over a period of one month or more.

◆ Using library resources or by writing or calling a local zoo, teams of students can find out which animals have been saved from extinction through breeding programs in zoos. Ask the teams to report to the class on the techniques used to learn more about the life history of these animals. Have them include information about the reintroduction of these animals into their natural habitats.

◆ Start a recycling program in your classroom or school. Ask the students to share their knowledge by showing family members and friends how to recycle.

◆ Weigh the materials your class or school recycles in a day. Have students multiply that weight by the number of school days in the year to get an idea of how much they are recycling during the year.

◆ Assign the class to make a list of ten ways their families could conserve natural resources. Three months later, ask them to report on how successful they were at changing their habits.

DISCUSSION QUESTIONS

◆ What is the most urgent problem related to the extinction of wildlife?

◆ How can you be a part of the solution to pollution?

◆ How do some of the more industrialized nations of the world contribute to the destruction of habitats in some of the less developed countries?

◆ What natural resources do you use on a daily basis? Can you categorize these natural resources according to geographic location and find the locations on a world map?

◆ What kinds of materials can be recycled? What materials cannot be recycled?

◆ What are some ways to avoid using materials that cannot be recycled?

CREATIVE WRITING IDEAS

◆ Have each student select one endangered plant or animal and make a press kit, including a news release, a brief article, and a picture, to publicize the need to save the species that was selected.

◆ Write to an animal preservation organization to find out how to sponsor an endangered whale, sea turtle, or other animal. Then hold a car wash, bake sale, craft fair, or other fund-raising activity to raise money for your animal.

◆ Arrange a visit to a local park or nature preserve and find out if your students can volunteer to help with any of their nature programs. Have the class write a detailed proposal telling how they think they could contribute.

◆ Ask the class to work in groups to compose letters to government officials giving the students' views on specific conservation issues that they have researched.

CAREER CLUES

◆ Conserving our natural resources and protecting the flora and fauna of the world will require trained personnel. Biologists, chemists, pollution specialists, park rangers, photographers, and physicists specializing in renewable energy research are but a few of the professionals necessary to help preserve our endangered wildlife. Ask the students to choose a specialization and find out specifics about each profession.

◆ Survey the class to find out if any parents are working in the conservation field. Invite guest speakers to class or request career information from environmental organizations.

◆ Contact a local government representative to find out what role government is playing in helping our endangered wildlife. Invite a speaker from a local conservation group or from one of the conservation organizations listed in this guide to make a presentation to your school on a conservation topic.

VOCABULARY BUILDER

CITES: acronym for the Convention on International Trade in Endangered Species of Wild Flora and Fauna, an international treaty signed by more than a hundred nations. The treaty forbids purchase or sale of any plant or animal listed as a protected species.

conservation: the careful use and preservation of natural resources, including wildlife and their habitats.

conservationists: people who support conservation practices and work to preserve wildlife.

indigenous: living or growing naturally in a particular region or place.

preservation: the protection of geographic areas to insure that habitats and wildlife are undisturbed.

protected species: a living organism that is threatened with extinction and protected by law.

recycle: the process of collecting and reusing materials such as newspapers, bottles, cans, and plastics to help conserve energy and resources, reduce pollution, and preserve wildlife habitats.

reintroduction: the process of returning plants and animals to the wild after successfully raising them in habitats created by humans.

sanctuary: a natural area set aside for the protection of wildlife.

ANSWERS TO "TRUTH OR DARE" ACTIVITY SHEET ON PAGE 19:

1. False. The scientific name for the mountain gorilla is *Gorilla gorilla beringei*. 2. False. 3. False. Mountain gorillas are shy and nonaggressive. 4. False. Mountain gorillas are diurnal—they are active in the day and sleep at night. 5. True. 6. True. 7. False. Females and their young spend more time in trees than males. 8. False. Mountain gorillas live only in the central African rain forests. 9. True. 10. True. 11. False. All gorillas that live in zoos are lowland gorillas. There are no mountain gorillas in captivity. 12. True. 13. False. There is one species of gorilla and three subspecies. There are 200 species of primates. 14. True. 15. True.

Name _____

Know the truth or dare to make a difference! Listed below are 15 statements about the mountain gorilla. Some of these statements are true and some are false. It is up to you to determine the truth. After you finish marking true or false below, your teacher will announce the correct answers. For every wrong answer in PART ONE, write down in PART TWO one way that you could help save the mountain gorilla or another endangered species.

TRUTH OR DARE

PART ONE: TRUTH???

True or False

_____ _____ 1. The scientific name of the mountain gorilla is *Gorilla gorilla gorilla.*

_____ _____ 2. Gorillas have tails.

_____ _____ 3. Gorillas are very aggressive animals.

_____ _____ 4. The gorilla is a nocturnal animal—it sleeps during the day and forages for food at night.

_____ _____ 5. A female gorilla generally has a baby about once every four or five years.

_____ _____ 6. On average, gorillas live to be about 35 to 40 years old.

_____ _____ 7. Male gorillas spend more of their time in trees than do the female and young gorillas.

_____ _____ 8. Mountain gorillas can be found in all of the rain forests of the world.

_____ _____ 9. Gorillas are a protected species—it is illegal to kill or capture them.

_____ _____ 10. There are less than 400 mountain gorillas left in the wild.

_____ _____ 11. All gorillas that live in zoos are mountain gorillas.

_____ _____ 12. Male gorillas weigh about twice as much as females.

_____ _____ 13. There are about 200 different species of gorillas.

_____ _____ 14. The gorilla is the largest member of the ape family.

_____ _____ 15. Mountain gorillas feed almost entirely upon leaves, twigs, and fruits.

PART TWO: OR DARE (to make a difference!)

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

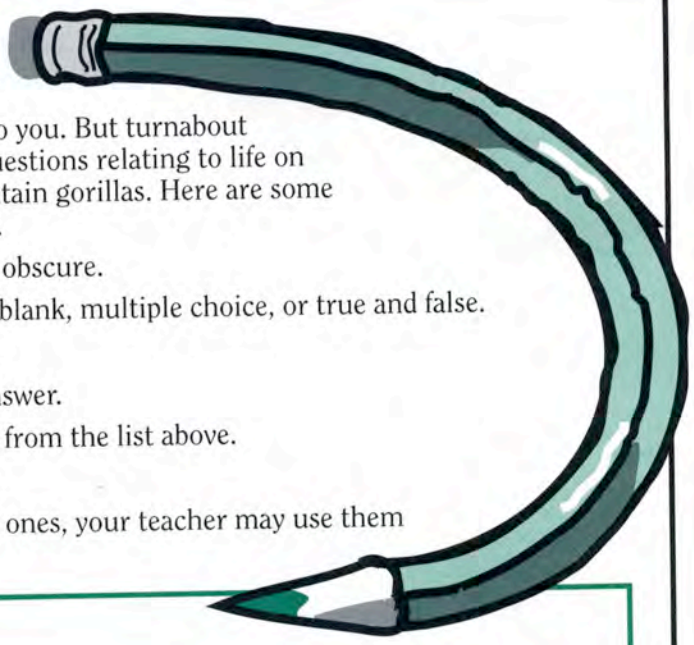
_____

5. _____

_____

Name _____

REVERSE-A-QUIZ



Usually your teacher makes up a quiz and gives it to you. But turnabout is fair play! Now it is your turn to make up some questions relating to life on earth, endangered species, conservation, and mountain gorillas. Here are some suggestions to help you prepare a challenging quiz.

1. Select information that is important but not too obscure.
2. Use several types of questions, such as fill in the blank, multiple choice, or true and false.
3. Record the answers on a separate sheet of paper.
4. Make sure each question has only one correct answer.
5. Include questions on a variety of different topics from the list above.
6. Be creative but make your questions reasonable.

Have Fun! But beware—if your questions are good ones, your teacher may use them to test the class!

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

FOR MORE INFORMATION

A selection of conservation organizations in the United States, Canada, and Europe appears below. Many of these groups are actively involved in programs to help save mountain gorillas:

UNITED STATES

African Wildlife Foundation*
The Mountain Gorilla Project
1717 Massachusetts Avenue, N.W.
Washington, D. C. 20036

Defenders of Wildlife
1244 19th Street, N.W.
Washington, D. C. 20036

The Digit Fund
45 Inverness Drive East, Suite B
Englewood, CO 80112

Environmental Defense Fund
257 Park Avenue South
New York, NY 10010

Greenpeace U.S.A.
1436 U Street, N.W.
Washington, D. C. 20009

Humane Society of the U. S.
Wildlife Division
2100 L Street, N.W.
Washington, D. C. 20037

Morris Animal Foundation
45 Inverness Drive East
Englewood, CO 80112

National Audubon Society
950 Third Avenue
New York, NY 10022

National Wildlife Federation
1400 16th Street, N.W.
Washington, D. C. 20036

The Nature Conservancy
1815 N. Lynn Street
Arlington, VA 22209

The Sierra Club
730 Polk Street
San Francisco, CA 94109

Student Conservation Association
Box 550
Charlestown, NH 03603

Ranger Rick's Nature Club
8925 Leesburg Pike
Vienna, VA 22184

Wildlife Conservation International
c/o New York Zoological Society
185th Street & Southern Blvd.
Building A
Bronx, NY 10460

World Wildlife Fund - U. S.
1250 24th Street, N.W.
Washington, D. C. 20037

U. S. Fish & Wildlife Service
U. S. Department of the Interior
Washington, D. C. 20240

CANADA

World Wildlife Fund - Canada
90 Eglinton Avenue East
Suite 504
Toronto, Ontario M4P 2Z7
Canada

EUROPE

The David Shepherd Conservation Foundation
P. O. Box 123
Godalming
Surrey GU8 4JS
England

Fauna and Flora Preservation Society*
1 Kensington Gore
London SW7 2AR
England

Frankfurt Zoological Society
Alfred-Brehm-Platz 16
D-6000 Frankfurt/Main
West Germany

International Union for the Conservation of Nature
Avenue du Mont-Blanc
CH-1196 Gland
Switzerland

World Wide Fund for Nature*
World Conservation Centre
Avenue du Mont-Blanc
CH-1196 Gland
Switzerland

*These three groups have jointly organized the **International Gorilla Conservation Program** to protect gorillas and their habitat.

EDUCATIONAL RESOURCES

The resources listed below represent a small selection of the enormous number of publications about conservation, endangered animals, and gorillas that are currently available. Our consultants and writers have helped us compile a sampling of different materials that they have found useful. The list is by no means complete and inclusion on the list does not constitute endorsement by Imax Corporation. You will find a wealth of information in your local bookstore or library, and conservation groups are happy to provide catalogs and lists of the educational materials that they offer.

BOOKS

Animal Extinctions: What Everyone Should Know. Edited by R. J. Hoage. Washington, D. C.: Smithsonian Institution Press, 1985.

Apes in Fact and Fiction. Gilda Berger. New York: Franklin Watts, Inc., 1980.

Atlas of the Environment. Geoffrey Lean. New York: Prentice Hall, 1990.

The Atlas of the Living World. David Attenborough, Philip Whitfield, Peter D. Moore, and Barry Cox. Boston: Houghton Mifflin, 1989.

Biodiversity. Edited by E. O. Wilson. Washington, D. C.: National Academy of Sciences, 1988.

Citizen's Guide to Global Issues. Edited by Walter Corson. Washington, D. C.: Global Tomorrow Coalition, 1985.

Collins Guide to the Rare Mammals of the World. John S. Burton and Bruce Pearson. New York: Viking Penguin, 1988.

The Deluge and the Ark: A Journey into Primate Worlds. Dale Peterson. Boston: Houghton Mifflin, 1989.

The Earth Care Annual. Edited by Russell Wild. Emmaus, PA: Rodale Press. Updated annually.

The Emerald Realm: Earth's Precious Rain Forests. National Geographic Special Publications Division. Washington, D. C.: National Geographic Society, 1990.

Endangered Species Handbook. Greta Nilsson. Washington, D. C.: Animal Welfare Institute, 1986.

GAIA: An Atlas of Planet Management. Norman Myers. New York: Doubleday, 1984.

The Global Ecology Handbook: What You Can Do About the Environmental Crisis. Global Tomorrow Coalition Staff. Boston: Beacon Press, 1990.

Gorilla: The Struggle for Survival in the Virungas. Michael Nichols and George B. Schaller. New York: Aperture Press, 1988.

Gorillas in the Mist. Dian Fossey. Boston: Houghton Mifflin, 1983.

The Green Lifestyle Guide. Jeremy Rifkin. New York: Henry Holt and Co., Inc., 1990

Imperiled Planet: Restoring Our Endangered Ecosystems. Edward Goldsmith, et al. Cambridge: MIT Press, 1990.

Information Please Environmental Almanac. World Resources Institute Staff. Boston: Houghton Mifflin. Updated annually.

Living in the Environment: An Introduction to Environmental Science. G. Tyler Miller, Jr. Belmont, CA: Wadsworth Publishing Company, 1992.

The Mountain Gorilla: Ecology and Behavior. George B. Schaller. Chicago: University of Chicago Press, 1988.

The Natural History of the Gorilla. A. F. Dixson. New York: Columbia University Press, 1981.

New State of the World Atlas. Michael Kidron and Ronald Segal. New York: Simon and Schuster, 1991.

The Recycler's Handbook. The Earth Works Group. Whittier, CA: Greenleaf Publishing Co., 1990.

Save the Earth. Jonathon Porritt. Atlanta: Turner Publications, 1991.

Save Our Planet: 750 Everyday Ways You Can Help Clean Up the Earth. Diane MacEachern. New York: Dell, 1990.

The Solution to Pollution: 101 Things You Can Do to Clean Up Your Environment. Laurence Sombke. New York: MasterMedia, Ltd, 1990.

State of the Ark: An Atlas of Conservation in Action. Lee Durrell. New York: Doubleday, 1986.

State of the World 1992: A Worldwatch Institute Report on Progress Toward a Sustainable Society. Lester R. Brown et al. New York: Norton, 1992.

The Year of the Gorilla. George B. Schaller. Chicago: The University of Chicago Press, 1988.

BOOKS FOR KIDS

Apes and Monkeys. Donald R. Shire. New York: Doubleday, 1991.

Endangered Animals. Edited by Victor H. Waldrop. Washington, D.C.: National Wildlife Federation, 1989.

The Endangered Wildlife Shufflebook. Richard Hefter and Martin Stephen Moskof. New York: Museum of Modern Art, 1991.

The Facts on File Children's Atlas. David and Jill Wright. New York: Facts on File, 1991.

50 Simple Things Kids Can Do to Save the Earth. John Javna. Kansas City: Andrews and McMeel, 1990.

Save the Earth: An Action Handbook for Kids. Betty Miles. New York: Knopf, 1991.

Going Green: A Kid's Handbook to Saving the Planet. John Elkington, Julie Hailes, Douglas Hill, and Joel Makower. New York: Puffin, 1990.

Gorillas and Chimps. David Chivers. New York: Gloucester Press, 1987.

Let's Talk Trash: The Kids' Book About Recycling. Kelly McQueen and David Fassler, MD. Burlington, VT: Waterfront Books, 1990.

Living Treasure: Saving Earth's Threatened Biodiversity. Lawrence Pringle. New York: Morrow Junior Books, 1991.

Wildlife Alert. Gene S. Stuart. Washington, D. C.: National Geographic Society, 1980.

MAGAZINES FOR KIDS

P3, The Earth-based Magazine for Kids. (P.O. Box 52, Montgomery, VT 05470.) Monthly for ages 6-12.

Ranger Rick. (National Wildlife Federation. 1400 16th Street, N.W., Washington, D. C. 20036.) Monthly for ages 6-12.

WORLD Magazine. (National Geographic Society, 17th & M Streets, N.W., Washington, D. C. 20036.) Monthly for ages 8 and older.

AUDIO RECORDINGS

Gorilla. Bernie Krause. Berkeley: The Nature Company, 1989. Compact disc.

Gorillas in the Mix. Bernie Krause and the Human Remains. Salem, MA: Wild Sanctuary Music, 1988. Compact disc.

Cloud Forest. Volume 1: Last Great Places On Earth. Dennis Hysom and Leighton Taylor. Berkeley: The Nature Company, 1991. Cassette or compact disc.

Natural Acts: A Sidelong View of Science and Nature. David Quammen. Louisville, CO: Audio Press. Two cassettes.

Panther Dream: A Story of the African Rain Forest. Bob and Wendy Weir. Hyperion, 1991. Book and cassette.

Wild Times at the Water Hole: Sensational Songs and Story. Bob Burough. New York: Metacom, 1991. Coloring book and cassette.

EDUCATIONAL RESOURCES (Continued)

The following educational materials are available from the National Geographic Society:

FILMS AND VIDEOS

Gorilla. Faced with the threat of extinction, shy and gentle gorillas bear little resemblance to the fictional King Kong. (All ages, 59 min., $24.20 video, 1981.)

The Living Earth. A fascinating look at the interdependence of our planet's land, water, and air, and the new technologies that have expanded our knowledge of Earth's systems. (Grades 10-12/adult, 25 min., $110 video, $390 film, 1991.)

Pollution: World at Risk. Examines the many causes, effects, and solutions to world pollution. (Grades 10-12/adult, 25 min., $110 video, $390 film, 1989.)

Recycling: It's Everybody's Job. Why recycling is the most logical solution to mounting garbage problems. (Grades 4-6, 20 min., $79 video, $280 film, 1992.)

Recycling: The Endless Circle. A detailed look at the concepts and processes involved in recycling. (Grades 7-12/adult, 25 min., $110 video, $390 film, 1992.)

Search for the Great Apes. Researcher Dian Fossey makes startling discoveries about the mountain gorilla and the elusive orangutan. (All ages, 52 min., $24.20 video, 1975.)

The Urban Gorilla. Captive gorillas may be their species' last hope for survival, but human keepers must adapt to gorilla ways for the apes to thrive. (All ages, 60 min., $24.20 video, 1991. Available beginning June 1992.)

EDUCATIONAL FILMSTRIPS

Challenges to a Healthy Environment. A balanced look at the environmental costs of modern technology. (Grades 7-12, $72, two filmstrips with cassettes, 1986.)

Earth's Endangered Environments. Fragile ecosystems threatened with destruction. (Grades 5-8, $72, two filmstrips with cassettes, 1991.)

One Earth: An Environmental Overview. Vital environmental issues around the world. (Grades 5-8, $72, two filmstrips with cassettes, 1991.)

Vanishing From the Earth. Causes, consequences, and solutions to extinction. (Grades 5-9, $97, three filmstrips with cassettes, 1986.)

VIDEODISCS AND COMPUTER SOFTWARE

GTV: Planetary Manager™. Explore environmental issues with videodisc, software, and Teacher's Guide, 1992. Macintosh® version available January 1992. IBM® version available March 1992. Apple IIGS® version available Fall 1992.

National Geographic Kids Network®. A curriculum-based program that enables students to conduct original research in areas of critical scientific concern, use a computer to record data, and then share their findings, via modem, with participating classes worldwide. Three eight-week NGS Kids Network units relate to the environmental issues addressed in this resource guide: *Acid Rain, Too Much Trash?,* and *What's in Our Water?* Call the toll-free number below for more information.

STV™: Rain Forest. The richness of a fragile ecosystem comes to life in this unique multimedia resource. Interactive videodisc, software, and user's guide, 1991.

Note: Prices are quoted in U. S. dollars and are subject to change.

To order National Geographic materials or to request a catalog:

In U. S. Call Toll Free 1-800-368-2728
weekdays, 8 a.m. to 4 p.m. Eastern time.
In Maryland, call 1-301-921-1330

In Canada Call Toll Free 1-800-268-2948
weekdays, 9 a.m. to 4:30 p.m. Eastern time.
In Toronto, call 1-416-890-1111

FAX your purchase orders ANYTIME.
FAX U. S. 1-301-921-1575
Canada 1-416-890-5080

WHERE YOU CAN SEE IMAX FILMS

The IMAX film *Mountain Gorilla* premieres in March 1992. Check with your local IMAX® or OMNIMAX® theater to find out when the film will be showing in your area:

UNITED STATES

Alabama	Huntsville	*Alabama Space and Rocket Center*
Arizona	Tusayan	*Grand Canyon IMAX Theater*
	Scottsdale	*IMAX Theater at Scottsdale Galleria*
California	Los Angeles	*California Museum of Science and Industry*
	San Diego	*San Diego Hall of Science*
	Santa Clara	*Great American Lockheed Pictorium*
Colorado	Denver	*Denver Museum of Natural History*
Connecticut	Norwalk	*The Maritime Center*
D. C.	Washington	*National Air and Space Museum, Smithsonian*
Florida	KSC	*NASA Kennedy Space Center's Spaceport*
Hawaii	Honolulu	*Hawaii IMAX Theater*
	Laie	*Polynesian Cultural Center*
Illinois	Chicago	*Museum of Science and Industry*
	Gurnee	*Six Flags Great America*
Kansas	Hutchinson	*Kansas Cosmosphere and Discovery Center*
Kentucky	Louisville	*Museum of History and Science*
Maryland	Baltimore	*Maryland Academy of Sciences*
Massachusetts	Boston	*Boston Museum of Science*
Minnesota	Shakopee	*Valleyfair Amusement Park*
	St. Paul	*The Science Museum of Minnesota*
Missouri	St. Louis	*St. Louis Science Center*
Nevada	Las Vegas	*Caesar's Palace*
New Mexico	Alamogordo	*The International Space Hall of Fame*
New York	New York	*American Museum of Natural History*
North Carolina	Charlotte	*Discovery Place*
Ohio	Cincinnati	*Museum Center at Union Terminal*
	Dayton	*U. S. Air Force Museum*
	Sandusky	*Cedar Point Amusement Park*
Pennsylvania	Philadelphia	*Franklin Institute*
	Pittsburgh	*Carnegie Science Center*
Texas	Fort Worth	*Fort Worth Museum of Science and History*
	Houston	*Houston Museum of Natural Science*
	San Antonio	*Rivercenter Mall*
Virginia	Richmond	*The Science Museum of Virginia*
Washington	Seattle	*Pacific Science Center*
		Pier 59-Waterfront Park
	Spokane	*Riverfront Park*

CANADA

Alberta	Edmonton	*Edmonton Space and Science Centre*
B. C.	Vancouver	*Science World British Columbia*
		CN IMAX Theatre
Manitoba	Winnipeg	*Portage Place IMAX Theatre*
Ontario	Niagara Falls	*Niagara IMAX Theatre*
	Toronto	*Ontario Place*
Quebec	Hull (Ottawa)	*The Canadian Museum of Civilization*
	Montreal	*Le Vieux-Port de Montreal*
Saskatchewan	Regina	*Saskatchewan Science Centre*

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