



SeaWorld/Busch Gardens Primates

K-3 Classroom Activities

Primate Trading Cards

OBJECTIVE

The student will identify basic characteristics of various primates.

ACTION

1. Explain that the class will be creating trading cards about primates. To choose their primate, students draw one paper out of the bowl prepared earlier. The primate's name that is written on the paper is the student's subject for their trading cards. Explain that there will be several students with the same primate.
2. Explain that the students will create five identical copies of their primate trading card. Each card will have a picture on one side and information on the other (show sample). Student information should include the following characteristics about the primate: range, habitat, diet, size, conservation, status, and one fun fact. Write these characteristics on the board or overhead. have students copy the words onto a piece of paper, skipping lines between words.
3. Allow several days for the students to conduct their research and find five pictures of their primate. (The pictures need to fit on the 5 x 7 in. index card.)
4. When ready, review student information for accuracy using the facts listed on the Primate Information Cards. (Students with the same primates may work together.)
5. Distribute index cards (5 per student), pencils and glue. Have students place or draw the pictures of their designated primate on the un-lined side of the index cards. Underneath the picture they should write in bold print the name of their primate. On the lined side of the index cards they should clearly print the following words: "range", "habitat", "diet", "size", "conservation", "status", and "one fun fact" and fill in the information they found.
6. Once the primate trading cards have been created, wrap each card in clear laminate. Distribute scissors so students may trim the excess laminate around the edges.
7. Instruct the students to keep one of their cards and trade the rest with other students around the room. Remind the students that they want a complete set of all five primates.

PRIMATE TRADING CARD LIST

1. Borneo Orangutan
(*Pongo pygmaeus*)
2. Chimpanzee
(*Pan troglodytes*)
3. Guinea Baboon
(*Papio hamadryas papio*)
4. Ring-tailed Lemur
(*Lemur catta*)
5. Western Lowland Gorilla
(*Gorilla gorilla gorilla*)



Gorillas make their homes in tropical forests, swamp forests, clearings and along the forest edges within the African countries of Cameroon, Peoples Republic of Congo, Gabon, Central African Re-public, and Equatorial Guinea.

MATERIALS

Per student:

- five, 5 x 7 in. index cards with lines on one side
- pencil
- pair of scissors
- glue or tape

Per class:

- one roll of laminating paper
- sheet(s) of paper cut into strips, one strip per student
- one copy of Primate Information Cards
- one large bowl
- one sample trading card
- images of primates on Trading Card List. Recommended Source: Rowe, Noel. 1996. *The Pictorial Guide to the Living Primates*. East Hampton, New York: Pogonias Press.

Preparation:

Write the name of each primate (from the Primate Trading Card List at right) on an individual slip of paper. (Repeat as many times as necessary for number of strips to equal number of students.) Fold the papers and place in a large bowl for students to draw from.

Create one trading card as a sample. Use information from the Primate Information Cards.

Primate Information Card: Bornean orangutan or orang-utan

Class: Mammalia **Order:** Primate

Family: Pongidae

Genus species: *Pongo* (gorilla/orangutan) *pygmaeus* (small, dwarfish) *pygmaeus*

Size: head and body length, male, 0.97 m (3.2 ft.); female 0.78 m (2.6 ft.)

Weight: males up to 90 kg (198 lb.); females to 50 kg (110 lb.)

Description: the only great ape from Asia; formerly two subspecies: Bornean (*P. p. pygmaeus*) has a round face with dark red coat. The Sumatran (*P. p. abelii*) has a long narrow face with paler longer hair. Adult males of both species have large cheek flaps.

Life span: up to 50 years

Habitat: Primary lowland swamp in Borneo and primary rainforest on Island of Borneo.

Diet: 60% fruit and other plant materials including leaves, bark, flowers, and nuts, occasionally insects and small mammals.

Status: listed as endangered by USFWS and protected by CITES Appendix I

Fun Facts

- Unlike other great apes, orangutans are solitary by nature; this may be related to their need for large quantities of fruit, which are dispersed throughout the forest.
- Even though they are able to walk upright for short distances, orangutans travel mostly by brachiating (swinging from one branch to another by the arms) through trees, using well-worn corridors in the forest canopy.
- Orangutans shelter themselves from rain and sun by holding leafy branches over their heads, and when constructing a night nest in the trees, will sometimes add a leafy roof.
- Males have a large throat sac that helps them make “long calls.” This travels for up to 1 km (.62 mile) through dense vegetation, which helps the males define territories. The “squeak-kiss” noise they make is a sign of annoyance.
- Bornean orangs have the most prolonged development of any mammal therefore they reproduce very slowly.

Conservation and Biological Value

Primarily fruit and plant eaters, orangutans play an essential role as seed dispersers throughout the forests of Indonesia as they digest and eliminate waste. They choose select green leaves and shoots, and in doing so act as pruners that aid in regenerating plant growth. The small food patches in Bornean forests, which cannot support more than one orangutan, force them to remain solitary or semi-solitary, and limits their social interactions. Uncontrolled increases in human populations in Southeast Asia have reduced the range and numbers of orangutans. Much of their habitat is either clear cut for agriculture or lumber production.

Primate Information Card: ring-tailed lemur

Class: Mammalia **Order:** Primate

Family: Lemuridae

Genus species: *Lemur* (ghost, specter) *catta* (cat)

Size: tail length 23.6 in.

Weight: males may weight 2705 gm (95.4 oz.); females may weight 2678 gm (94.5 oz.)

Description: a small primate with a conspicuous black and white banded tail. Males have a fingernail-like spur near each wrist that emit a strong scent for marking territories.

Life span: average about 27 years

Sexual maturity: reached at 21-30 mo.

Gestation: approximately 134-138 days; typically one offspring, two when food is plentiful; mating season is from August through Sept.

Habitat: scrub, spiny dessert, dry, and gallery; Madagascar small mammals.

Status: listed as endangered by USFWS and protected by CITES Appendix I

Fun Facts

- Ring-tailed lemurs are the most terrestrial of all lemurs, spending a great deal of time on the ground instead of the trees. Males often have “stink fights” in which they wave their tails (having been rubbed on the strong-smelling wrist gland) at one another.
- When territory or other disputes take place within a society, female lemurs always win.
- Ring-tailed lemurs do not have a stable hierarchy. In fact this species is the only primate in which the infants “grapple” for dominance.
- Males scent mark by rubbing the spur on the male’s forearm on the scent gland of the inner arm, then use it to scar branches and leave their scent behind.
- A female lemur carries her newborn in her mouth until the baby is able to cling to the fur on mother’s stomach or back.

Conservation and Biological Value

Ring-tailed lemurs are the only primate in Madagascar to make extensive use of the ground. In addition, they range farther into the interior highlands of Madagascar than any other lemur species. This is an important example of the amazing adaptive radiation of primates exclusive to the island. With the widespread decrease of these primates, Madagascar faces the threat of losing a species, which fills an important ecological role. Ring-tailed lemur numbers are declining rapidly due to continuous deforestation for the logging industry and plantations as well as slash and burn agriculture. This species can only survive in primary vegetation.

Primate Information Card: chimpanzee, chimp

Class: Mammalia **Order:** Primates

Family: Hominidae

Genus species: *Pan* (all) *troglodytes*
(cave dwellers)

Size: male to 1.2 m (4 ft.), female to 1.2 m (3.5 ft.)

Weight: males to 60 kg (132 lb.), females up to 47 kg (103.6 lb.)

Description: long arms with opposable thumbs; hair color brown to black; adults similar in size to adolescent humans

Life span: average of 30 to 40 years in the wild; 45 to 55 years in managed situations

Sexual maturity: females reach maturity at 6 to 10 years and males at 7 to 8 years

Gestation: 230 to 240 days; 36 days between estral cycles; weaning in 48 mo.

Habitat: tropical forests of Eq. Africa

Diet: omnivores that feed on 60% fruits, 30% leaves and other vegetation, 10% animal matter (insects, meat)

Status: under USFWS, endangered in the wild; protected by CITES Apx. I

Fun Facts

- Young chimps learn to create tools from objects in their environment by watching others; they use sticks to extract termites to eat and crumple leaves to soak up water to drink.
- Just like people, mother chimpanzees often develop lifelong relationships with their offspring.
- By following wild chimps through the forests, scientists discovered that chimps use medicinal plants to treat themselves for illness and injury. Scientists have isolated an anti-tumor agent in one such plant!
- Chimpanzees are very social primates that use facial expressions, vocalizations, body language, grooming, and even kisses and pats to communicate with members of their group.

Conservation and Biological Value

While foraging through an area, a chimp feeds on a variety of fruits. A few days later, the seeds pass through the digestive tract and germinate far away from the parent plant. This method of seed dispersal insures healthy plant diversity within the habitat and creates shelter and food for other forest dwellers, including native peoples.

Because chimps closely resemble humans, studying their behavior and biology may provide great insight for solving the mysteries of our own ancestry and social development. There are only four subspecies of chimpanzee left in the wild today. Habitat loss, poaching, and the bush meat trade are the main causes behind chimp

Primate Information Card: gorilla

Class: Mammalia **Order:** Primate

Family: Hominidae

Genus species: *Gorilla gorilla gorilla*
(gorilla, hairy hu-man)

Size: male to 1.7 m (5.5 ft.), female to 1.4 m (4.5 ft.)

Weight: males to 182 kg (400 lb.) , females up to 102 kg (225 lb.)

Description: black to grayish or reddish-brown hair that covers the body (except face, soles of hands and feet, and upper chest). When mature, males grow silver-gray hair across the back and upper thighs. Males have a bone ridge on the top of the skull (sagittal crest).

Life span: 40 years in captivity; wild studies of longevity is inconclusive.

Habitat: tropical forests, swamp forests, clearings and forest edges of Cameroon, Peoples Republic of Congo, Gabon, Central African Republic, and Equatorial Guinea.

Diet: fruits, stems, flowers, shoots, bulbs, bark, leaves, pith, as well as invertebrates such as termites and ants; seasonal frugivores.

Fun Facts

- The intimidating chest-beating charge of a male gorilla is usually a bluff to scare off intruders while the rest of his band disappears into the forest. However, it is also used in play as well.
- Wild gorillas are difficult to study because they are shy, secretive inhabitants of densely vegetated tropical forests.
- The huge silverback is a tolerant father who baby-sits for his offspring so the females can forage without the hindrance of playful young.
- During the early weeks, a newborn gorilla is clutched belly-to-belly (ventral) for close contact until it develops the strength and coordination to cling onto its mother's back (dorsal) hair at about two months.

Conservation and Biological Value

Like the other apes, gorillas feed on seasonal fruits and disperse seeds in their dung as they travel from region to region. Because of new plant growth that occurs in bright sunlight, gorillas like to forage in areas cleared by elephants, storms, and even people. They leave behind seeds that generate new growth. There are only five subspecies of gorilla left in the wild. Habitat loss and poaching are the main causes of gorilla deaths. The US Fish and Wildlife Service lists gorillas as endangered. Under CITES, gorillas appear in Appendix I.

Primate Information Card: baboon

Class: Mammalia **Order:** Primates

Family: Cercopithecidae

Genus species: *Papio* (baboon)
cynocephalus (doglike face and head)

Size: head and body length is 60-72.5 cm (24-29 inches), tail is 56-84cm (22-34 inches)

Weight: males 27-44 kg (59-97 pounds), females 14-17 kg (31-37 pounds)

Description: a primate with coarse tan fur covering their body; face protrudes similar to a dog's muzzle

Life span: average about 20-30 years

Sexual maturity: females 4 -5 years old; males at 8-10 years old

Gestation: 6 months

Habitat: Savannas and arid zones; sub-Saharan Africa

Status: CITES Appendix II as with all primates, not listed on USFWS

Fun Facts

- Baboons have complex social structures with 8 to 200 individuals per troop. They use at least 10 different vocalizations to communicate.
- When traveling as a group, males will lead; females and young stay safe in the middle and less dominant males bring up the rear.
- A baboon group's hierarchy is such a serious matter, some sub-species have developed interesting behaviors intended to avoid confrontation and retaliation. For example, males have frequently been documented using infants as a kind of "passport" for safe approach toward another male. One male will pick up the infant and hold it up as it nears the other male. This action often calms heated nerves and allows the former male to approach safely.
- With canines up to two inches long, adult males will take on just about any small predators. A lone male is able to intimidate and chase away an animal as large as a jackal. In fact, larger cats such as leopards are the only main predatorial threat (other than humans) and fierce dominant males will still gang up and harass such intruders until they retreat.

Conservation and Biological Value

They are important in their natural environment not only serving as food for larger predators, but also aiding in seed dispersal due to their messy foraging habits. They are also efficient predators of smaller animals and their young, keeping some animals populations in check. Due to their extremely opportunistic lifestyle, ba-boons have been able to fill a tremendous number of different ecological niches. Thus, they are one of the most successful African primates and are not listed as threatened or endangered, however, the same behavioral adaptations that make them so successful also cause them to be considered pests by humans in many areas. Raids on farmer's crops and other such intrusions into human settlements have made baboons subject to organized extermination projects.