

**Activity 2.1.1 Harnessing the Wild****Purpose**

Have you ever walked through the zoo and wondered why the lions and tigers and bears are behind bars while you can wander peacefully through the petting zoo of sheep and goats? Domestication is bringing a wild animal species under human control. What makes an animal domesticated?

An animal must have six characteristics to be completely domesticated. An animal's diet must be flexible, the animal must have a fast growth rate, be able to be bred in captivity, behave calmly and predictably, have a flight zone that can be managed, and accept humans as their leaders within a social hierarchy. If an animal species has all six of these characteristics, the species can be domesticated. Sometimes animals can return to the wild after domestication and survive in the wild. These animals become feral. Common feral populations include horses, cats, dogs, goats, and pigs. An individual animal from a wild species trained and manipulated by a human is not domesticated. A tame animal can be trained but its offspring will retain wild instincts.

As you continue your journey through the zoo, you observe the elephant trainer working with the elephant. Is the elephant wild, tame, or domesticated? How does a person domesticate a species?

**Materials****Per student:**

- Highlighter
- Pencil
- Computer with Internet access
- Agriscience Library
- *Agriscience Notebook*

**Procedure**

In this activity, you will use the characteristics of domestication to determine what it takes to domesticate an animal. Table 1 is a list of exhibits you saw on your last trip to the zoo.

**Table 1. Zoo Exhibits**

<b>Domestic Animals</b>	<b>Wild Animals</b>
Alpaca	Antelope
Canary	Baboon
Guide Dog	Beaver
Ferret	Elephant
Guinea pig	Gazelle
Laboratory mice	Lion
Mustang	Ostrich
Rabbit	Panda
Reindeer	Warthog
Water buffalo	Wolf

## Part One – Choosing Animals

Select one domestic animal and two wild animals from Table 1. Record your choices in Table 2 in the appropriate space provided.

## Part Two – Research

Research each animal and determine its diet, growth rate, reproductive habits, disposition, temperament, and social structures. Record the information in Table 2 of *Activity 2.1.1 Student Worksheet*.

## Part Three – Identifying Domestication

On Table 2, highlight any factor that prevents the wild animals from being domesticated. Refer to your notes from the *Domestication* presentation to help you. In the space provided under Table 2 of *Activity 2.1.1 Student Worksheet*, write a summary of your findings. Compare the characteristics of the domestic animal with the wild animals you chose. Why do you feel humans were able to domesticate that animal?

## Conclusion

1. Based on your experience and knowledge so far, is it beneficial to animals to be domesticated? Explain?

I believe it is beneficial to animals to be domesticated because they will be less dangerous and were able to come in contact with them.

2. What is the difference between taming wild animals and domesticating them?

Taming them means to have them under control and domesticating them is the process of taming an animal and keeping it as a pet or on a farm.

3. In your opinion, why can one animal be domesticated while another animal in a closely related species, i.e. dogs and wolves, cannot?

Let's take for instance a dog is maybe smaller than a wolf and easier to tame from when they are maybe a baby. On the other hand, a wolf is very protective and would hurt you if you came close.

***\*Be prepared to share your responses to Conclusion questions in class.***


**Activity 2.1.1 Student Worksheet**
**Table 2. Animal Information**

Name of Animal	Domestic Animal Rabbit	Wild Animal 1 Lion	Wild Animal 2 Panda
<b>Diet</b>	Rabbits will also eat bark on trees, tender twigs and sprouts, fruits, seeds and other nutritious foods in much small amounts. This is important to know when we decide what is a healthy diet for our rabbits. The majority of the house rabbit diet should be composed of grass hay (any variety).	Lions consume a wide variety of prey, from wildebeest, impala, zebra, giraffe, buffalo and wild hogs to sometimes rhinos and hippos. They will also feed on smaller animals such as hares, birds and reptiles. Lions are also known to attack elephants when food is scarce.	A panda's daily diet consists almost entirely of the leaves, stems and shoots of various bamboo species. Bamboo contains very little nutritional value so pandas must eat 12-38kg every day to meet their energy needs. But they do branch out, with about 1% of their diet comprising other plants and even meat.
<b>Growth Rate</b>	Rabbit growth can also be dependent on breed. Flemish Giant rabbits are usually born about 3-4 oz., and by 8-9 weeks weigh 5 lbs. From 8 weeks to 8 months, the rabbit can gain 0.5 to 0.75 lb./week and is not considered full grown until 14 months of age.	Adult lions are between 3 and 8 years old. They are fully grown and are of breeding age - females will often have cubs. Adult males are in their prime. A male's mane will grow - adult males mostly have medium or large manes.	Giant pandas are fully mature and able to breed at four to six years old (females at four, males at six), while captive giant pandas mature two to three years earlier. Young male pandas have a lower priority in the wild, and barely have any opportunity to mate until 7 or 8 years old.
<b>Ability to Breed in Captivity</b>	Rabbit breeds of medium to large size are sexually mature at 4 to 4.5 months, giant breeds at 6 to 9 months, and small breeds at 3.5 to 4 months of age. The release of eggs in female rabbits is triggered by sexual intercourse, not by a cycle of hormones as in humans.	Mating Season: Throughout the year. Gestation: Around 110 days. Litter size: 3-4 cubs. Young cubs are vulnerable to predation by hyenas, leopards and black-backed	Giant pandas reach breeding maturity between four and eight years of age. They may be reproductive until about age 20. Female pandas ovulate only once a year, in the spring. A short period of two to three days around ovulation is the only time she is able to conceive.

		<p>jackals. The cubs begin hunting at 11 months but remain with their mother for at least two years.</p>	
Disposition	<p>Grunts are often angry reactions to a human behavior or towards another rabbit and may be followed by scratching orbiting. Rabbits grunt when they feel threatened, or to show their disapproval if they do not want to be handled – means “leave me alone” -or- “back off!”</p>	<p>Lions within a pride are often affectionate and, when resting, seem to enjoy good fellowship with lots of touching, head rubbing, licking and purring. The males are territorial, and will roar and use scent markings to establish their domains.</p> <p>Females do almost all of the hunting. They are mainly nocturnal and work in teams to stalk and ambush prey</p>	<p>The giant panda is a terrestrial animal and primarily spends its life roaming and feeding in the bamboo forests of the Qinling Mountains and in the hilly province of Sichuan. Giant pandas are generally solitary, and each adult has a defined territory, and a female is not tolerant of other females in her range .</p>
Temperament	<p>There are no temperament traits that have been selectively bred, so any breed of rabbit can have the personality you are looking for.</p>	<p>However, lions are social, and may form fighting groups, whereas tigers are usually solitary, and it is believed that a group of lions (2 – 3 males) or lionesses (2 – 4 females) is more than match for a single tiger or tigress</p>	<p>The giant panda is a terrestrial animal and primarily spends its life roaming and feeding in the bamboo forests of the Qinling Mountains and in the hilly province of Sichuan. Giant pandas are generally solitary, and each adult has a defined territory, and a female is not tolerant of other females in her range</p>

<b>Social Hierarchy</b>	<b>The social structure of rabbits together is really quite something. Unlike cats or dogs, the rabbit hierarchy and social structure is like an interlocking star system!</b>	<b>There is no hierarchy between females, and no particular bonding between any pride members. A pair of females will be found together no more than 25 – 50% of the time.</b>	<b>Giant pandas are solitary and peaceful animals but if threatened they will surely attack (just like other animals). They may appear cute and cuddly but they can defend themselves very well.</b>
-------------------------	--	--	--

**Well, let's start off with that the animals I have chosen are my favorite animals. In my opinion these animals are amazing. The animals that I have chosen is the magnificent Panda, Lion, and rabbit. All of these animals have very different growth rates, breeding, diets, etc. You get the idea; these animals are very different from each other. The domestic animal which is the rabbit in my opinion has better manners than the wild animals. The rabbit knows how to act around humans unlike the wild animals they may act crazy or feel as if they are being attacked. I think humans were able to domesticate the rabbit and not the lion or such because the rabbit is smaller and would not attack or harm the human unlike the lion and panda.**