



NAME: _____

DATE: _____

Causes of Extinction

Directions: Read about some of the causes of extinction. Then, use this information along with your knowledge from other sources to answer these three critical thinking questions:

- 1) What are some reasons why people take actions such as overhunting or deforestation even when their actions could lead to extinction of rare species?
- 2) What are some of the most important reasons why endangered species should be saved from extinction?
- 3) What actions do you think concerned citizens could take to prevent more species from becoming endangered?

Outer Space Collision – When huge objects from outer space like asteroids and meteors collide with Earth, clouds of gas and dust surround the globe and block sunlight. The lack of light and clean air cause many plant and animal species to die out. Lucky for us, this is a very rare event, but when it happens, it is fatal to many types of plants and animals. EXAMPLE: Many species of dinosaurs, including Tyrannosaurus rex, became extinct about 65 million years ago when a large asteroid hit our planet.

Habitat Loss / Pollution – Every living thing needs a place to live, find food, and reproduce. When natural surroundings and food sources are damaged or destroyed, animal species may not be able to reproduce quickly enough to survive. EXAMPLES: The destruction of rainforests in West Africa by loggers and farmers made it impossible for the Miss Waldron's red colobus monkey to survive. This type of monkey is now believed to be extinct. Plastic bags tossed on the beach can endanger leatherback turtles, which mistake the plastic for its favorite meal, jellyfish. Turtles can't digest plastic and choke on it.

Overhunting – Eager to make a profit, fishermen or hunters sometimes kill animal species faster than these populations can reproduce. EXAMPLE: One of the world's most abundant birds, the passenger pigeon (*Ectopistes migratorius*), was driven to extinction by overhunting in the early 20th century. The last passenger pigeon, named Martha, died alone at the Cincinnati Zoo on September 1, 1914.

Global Climate Change – The gases that make up Earth's atmosphere are in a delicate balance. Human actions on a large scale can cause levels of carbon dioxide, methane and other gases in the atmosphere to increase. This can cause the ice caps to melt, which in turn can cause sea levels to rise, and lead to flooding in coastal areas. EXAMPLES: Gases released from car exhausts can add more carbon monoxide to the air; deforestation can reduce the amount of oxygen in the atmosphere.

Invasive Species – When species are transported from their native habitats to new ones, they compete with the resident species for food or space. Sometimes the resident species become a new food source for the newcomers. Some invasive species are microscopic, as in bacteria that spread disease. EXAMPLE: Dodos, flightless birds, lived on the small island of Mauritius (off the east coast of Africa) and evolved in isolation from major predators. When humans arrived there in early 1500s with new species such as dogs, monkeys, pigs, and rats, these other invasive species wiped out the dodos by the late 1600s.