Name _____ Class_____Date_____

Skills Worksheet

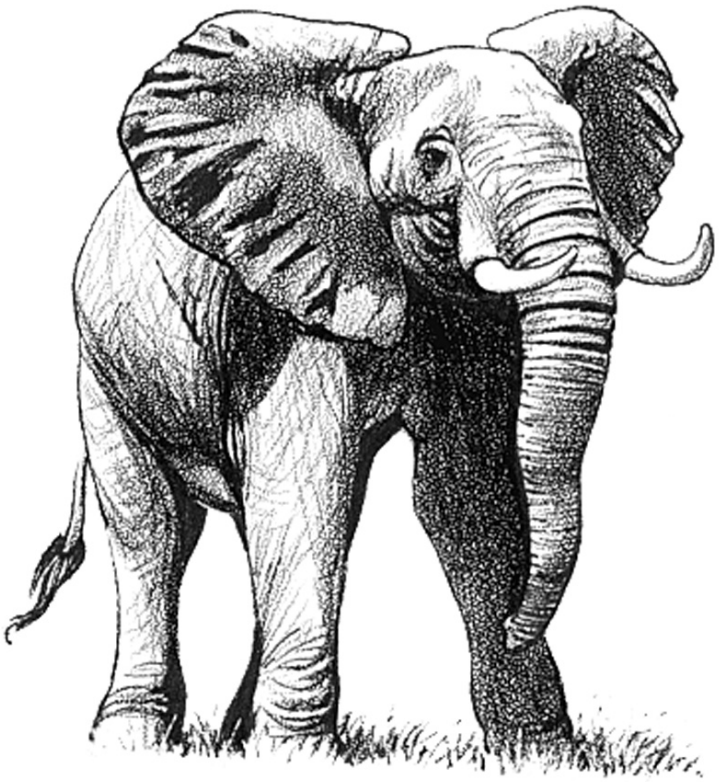
Science Skills

APPLYING INFORMATION

Darwin stated that evolution occurs through natural selection. The key factor is the environment. The environment "selects" which organisms will survive and reproduce. Traits possessed by organisms successful at survival and reproduction are more likely to be transmitted to the next generation. These traits will, therefore, become common.

Read the following information about the elephant population of Queen Elizabeth National Park in Uganda, Africa. Then fill in the table on the following page.

Normally, nearly all African elephants, male and female, have tusks. In 1930, only 1 percent of the elephant population in Queen Elizabeth National Park was tuskless because of a rare genetic mutation. By 1963, there were 3,500 elephants in the park. In the 1970s, a civil war began in Uganda. Much of the wildlife was killed for food, and poachers killed elephants for their ivory tusks. By 1992, the elephant population had dropped to about 200. But by 1998, the population had increased to 1,200. A survey in 1998 revealed that as many as 30 percent of the adult elephants did not have tusks. Ugandan wildlife officials also noted a decline in poaching.



Science Skills *continued*

In the space provided in the table below, explain how each of the given principles of natural selection applies to the situation described on the previous page.

The Process of Natural Selection

Principles	Applications
All species have genetic variation.	1. _____
Living things face many challenges in the struggle to exist.	2. _____
Individuals of species often compete with one another to survive.	3. _____
Individuals that are better able to cope with the challenges of their environment tend to leave more offspring than those less suited.	4. _____
The characteristics of the individuals best suited to a particular environment tend to increase in a population over time.	5. _____