

**Darwin's Natural Selection Case Studies**

Name \_\_\_\_\_

1) There are 2 types of worms: worms that eat at night (nocturnal) and worms that eat during the day (diurnal). The birds eat during the day and seem to be eating ONLY the diurnal worms. The nocturnal worms are in their burrows during this time. Due to bird predation and other factors, not all worms produced live to the age of reproduction.

a. What worm has natural selection selected AGAINST? \_\_\_\_\_ FOR? \_\_\_\_\_

**Darwin's points: Identify the points in the scenario above.**


Overproduction (more offspring produced than survive). \_\_\_\_\_

Population has heritable variation. \_\_\_\_\_

Struggle to survive \_\_\_\_\_

Differential Reproduction (those with better variation survive and reproduce). \_\_\_\_\_

How the population will change over time. \_\_\_\_\_

2)  In ostriches, there are 2 types: ones that run fast and those that run slowly. The fast birds can reach up to 50 miles an hour. Jackals love to eat ostrich, and they can reach speeds of up to 35-40 miles per hour. Due to predation and other factors, not all ostrich produced live to the age of reproduction.

a. What ostrich will natural selection select AGAINST? \_\_\_\_\_ FOR? \_\_\_\_\_

**Darwin's points: Identify the points in the scenario above.**

Overproduction (more offspring produced than survive). \_\_\_\_\_

Population has heritable variation. \_\_\_\_\_

Struggle to survive \_\_\_\_\_

Differential Reproduction (those with better variation survive and reproduce) \_\_\_\_\_

How the population will change over time. \_\_\_\_\_

3) There are two types of rabbits: those that strictly eat grass and those that strictly eat berries and flowers. A drought occurs one year, and the plants have difficulty producing any extras (flowers, berries, etc.). They can only try and keep themselves green. Due to drought and other factors such as predation, not all rabbits produced live to the age of reproduction.



a. What rabbit will natural selection select AGAINST? \_\_\_\_\_ FOR? \_\_\_\_\_

**Darwin's points: Identify the points in the scenario above.**

Overproduction (more offspring produced than survive). \_\_\_\_\_

Population has heritable variation. \_\_\_\_\_

Struggle to survive \_\_\_\_\_

Differential Reproduction (those with better variation survive and reproduce) \_\_\_\_\_

How the population will change over time. \_\_\_\_\_