

Darwin's Natural Selection Worksheet

Name _____

Date: _____ Period: _____ Table #: _____

Read the following situations below and fill in the chart for each of the 4 parts of Darwin's theory of natural selection. Each of these boxes must be a complete sentence and should be done in order (follow the arrows).

1) There are 2 types of worms: worms that eat at night (nocturnal) and worms that eat during the day (diurnal). The birds only eat during the day so they only eat the diurnal worms. The nocturnal worms are in their burrows during this time. Each spring when the worms reproduce, they have about 500 babies but only 100 of these 500 ever become old enough to reproduce.



OVERPRODUCTION: 	VARIATION:
SURVIVAL OF THE FITTEST: (Who would die? Who would live?) 	SUCCESSFUL REPRODUCTION: (Who would be more likely to reproduce?)

2) There are 3 types of polar bears: ones with thick coats, ones with thin coats and ones with medium coats. It is fall, soon to be winter. The temperatures are dropping rapidly and the bears must be kept warm, or they will freeze to death. Many of the bears have had about 2 cubs each but due to the extreme temperatures, many mothers only have one cub left.



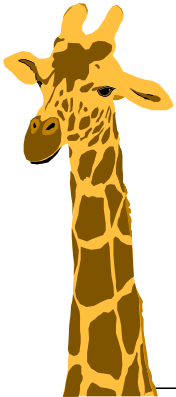
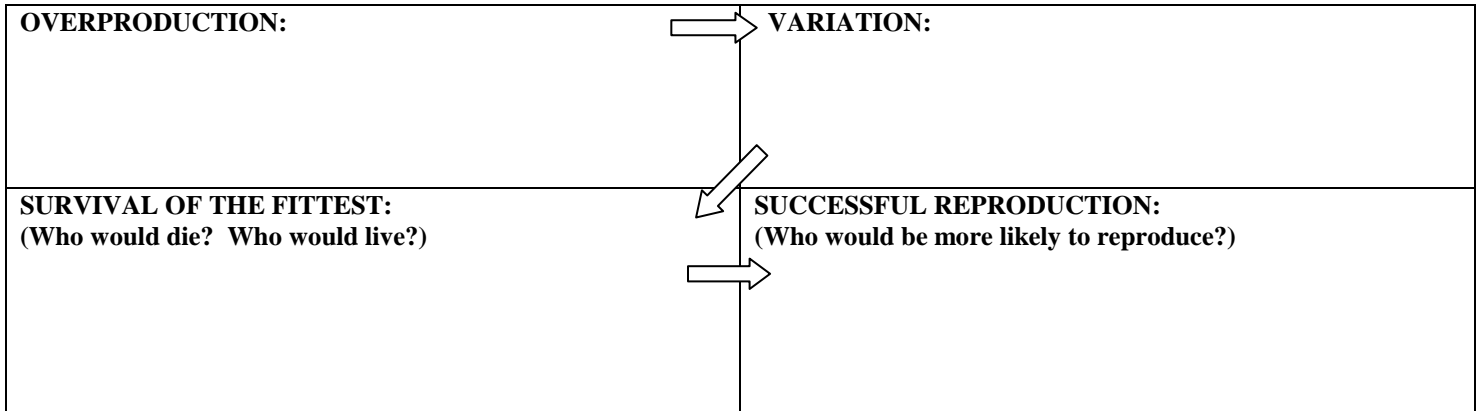
OVERPRODUCTION: 	VARIATION:
SURVIVAL OF THE FITTEST: (Who would die? Who would live?) 	SUCCESSFUL REPRODUCTION: (Who would be more likely to reproduce?)

3) In ostriches, there are 2 types: ones that run fast and those that run slowly. The fast birds can reach up to 40 miles an hour. Jackals love to eat ostrich, and they can reach speeds of up to 35-40 miles per hour. A flock of ostrich will lay about 10 eggs (each mother only lays 1), but many rodents break into the eggs and eat the fetus before they hatch.



OVERPRODUCTION: 	VARIATION:
SURVIVAL OF THE FITTEST: (Who would die? Who would live?) 	SUCCESSFUL REPRODUCTION: (Who would be more likely to reproduce?)

4) 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. The rabbits have had babies all year long, but many are eaten by foxes or hawks. Due to the drought, many have starved to death.



5) Pedro believes that giraffes have long necks because they have stretched their necks to try and reach food that is high in trees. Since the parent had stretched its neck, it passed the long neck on to its offspring.

Ryan believes that giraffes have long necks because the ones with long necks were able to reach the food, and those with short necks could not and died. The long necked giraffes reproduced, and soon all of the giraffes had long necks.

Which one of these arguments fits better with Darwin's theory of Natural Selection?
Explain your reasoning.
