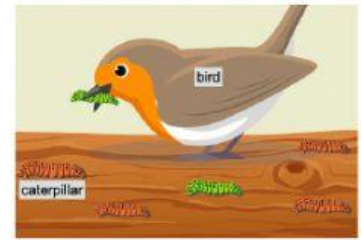


The Theory of Natural Selection

1. Which statement is correct about the image?

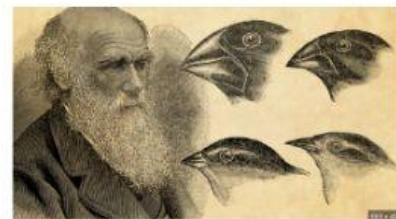


2. These two ducks belong to the same species. The difference in their appearance is an example of:

3. Which process leads to a variety in genes?



4. Which Scientist came up with the theory of Evolution?



5. The fur color of the cat is an observable trait.
This is known as the:



6. Which of the following equations is correct in describing the Hardy-Weinberg equation.

$p^2 \times 2pq - q^2 = 1$

☐ $p^2 + 2pq + q^2 = 1$

$p + q = 1$

☐ $p^2 + q^2 = 1$

7. A group of bears moved to a cold area. The thin-furred and the average-furred bears died. The thick-furred bears were able to survive.

What type of natural selection is this?



8. Mutations and Natural selection are processes that cause evolution.

9. Genetic drift has the same effect on different sized populations.

10. A specific phenotype may help individuals of a population survive and reproduce.

11. Natural selection results in individuals who are perfectly suited to their environment.

12. The passage of a trait from one generation to the next:

13: How well an organism can survive and reproduce compared to other individuals in the population:

14. All the alleles in individuals of a population:

15. A trait that helps an organism to survive and reproduce:

16. The genetic make-up of an organism:

17. When natural Selection favors both extreme phenotypes:

18. Having two different alleles of a particular gene or genes:

19. When alleles move from one population to another:

20. Humans are able to cause organisms to change over time through:

21. Consider the picture illustrating a Mice gene pool.

B = Brown and b = black

Answer each of the following questions:

a) Which phenotype is dominant:

b) Which phenotype is recessive:



c) How many total alleles are there in the mice gene pool:

d) What is the total number of dominant alleles in the mice gene pool:

e) What is the total number of recessive alleles in the mice gene pool?