

Name Key Period All

## Evolution/ Geologic Time Practice questions

Use the following words to complete questions 1-2. The words are used ONCE each

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Mimicry	Fossils	Charles Darwin
Analogous Structures	Vestigial Structure	Embryology
Natural selection	Artificial selection	Gene Pool
Genetic Drift	Directional Selection	Comparative Genetics (genomics)
Speciation	Camouflage	Jean Lemarck
Reproductive Isolation	Divergent Evolution	Co-evolution
Geographic Isolation	Homologous Structure	Exaptation
Convergent Evolution	Sexual Selection	

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Read the Scenarios and write the correct term/s that represent the scenario

1- Suppose there was a small population of rabbits that left the main population and founded a new population that was separate. This means the rabbits only bred within their small population. A high number of the rabbits had longer ears which allowed it to hear approaching danger better than other rabbits in the population. Over generations there is a high percentage that is at least 2-3 rabbits per litter will have long ears. The frequency of Long Ears is much higher in this particular isolated rabbit population than normal larger populations of rabbits. What evolution word explains this high frequency of long ears allele in this population?

Genetic Drift

2- A species of blue, white, and blue-white speckled butterflies live in a meadow full of blue and white wildflowers. The original population was said to have 30 blue, 55 speckled, and 15 white butterflies. Over the last few years they did a butterfly count in this meadow, and found 55 blue, 40 speckled, and 5 white butterflies. This butterfly population follows which kind of selection.

Directional Selection

3- Fox hunting is a popular sport in many countries. Dogs are used to chase these wild K-9 foxes. Over the years people have bred dogs to have incredible olfactory (smelling) noses. The dogs continue to have better noses each generation.

Artificial Selection / Selective Breeding

4- Insects love to eat rose bushes, especially the tiny aphid insect. Lady bugs love to eat aphids, thus they live on rose bushes with the aphids. Most rose bushes have thorns. If you look close at the thorns you are liable to see some thorns moving. These "moving thorns" are really aphids resembling rose bush thorns.

Camouflage

5- Two sister species of Monkey Flower were known to interbreed freely for a long period of time. Over time one of the species of Monkey Flower started to release its pollen later and later in the year. Over time the Two species of Monkey Flower can no longer interbreed and produce offspring because they do not produce pollen at the same time of year.

Reproductive Isolation