

Accelerated Biology

Basic Terminology

Evolution –

It can NOT happen in one generation (that would be a mutation).

Mutation –

Variation –

Adaptation –

Fitness –

Darwin and Wallace

Charles Darwin – Spent five years aboard the _____ observing a variety of _____ in a wide variety of _____.

Darwin observed that each type of organism was well suited for the _____ in which it lived, yet seemed to be _____ to other organisms in other parts of the world.

Published _____ in 1859 to explain his theory of descent with modification.

Alfred Wallace – Published his paper first, but is not often recognized.

- Darwin's theory was more _____.
- Darwin's paper contained more extensive _____.
- Darwin proposed a _____ for change over time.

Natural Selection

Natural selection –

_____ environmental pressures *select* the best adapted individuals in a population to survive longer and reproduce more. Thus, passing on their beneficial traits to the next generation.

Examples of environmental pressures for a plant include: temperature, sunlight, water, minerals in the soil. If the environment _____, other traits may be _____ for.

Evolution by Natural Selection

The members of a population have heritable _____.

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In each population, many more individuals are _____ each generation than the environment can _____.

Some individuals possess _____ that enable them to _____ and _____ more than other individuals.

An _____ number of individuals in succeeding generations possess the adaptation.

The result of natural selection is a population _____ to its local _____.

Natural Selection Simply Stated

1. _____ 4. _____
2. _____
3. _____ 5. _____