

Name: _____ Period: _____ Date: _____

Evolution Unit Study Guide

Who first described the process of evolution?

Describe his journey around the world and his findings/observations including those on the Galapagos Islands.

Explain in detail, what evolution is and give an example. Use at least 6 of the following words in your explanation: **Darwin, species, adapt, adaptation, survive, reproduce, habitat, fitness, population, competition, traits, variation, organism**

What is natural selection?

Describe the 3 conditions necessary for evolution by natural selection.

- 1.
- 2.
- 3.

Explain the difference between inherited variation and artificial selection.

Define struggle for existence.

Define fitness.

What is an adaptation?

List the 3 types of adaptations and describe how each one helps an organism survive and reproduce in its natural environment.

- 1.
- 2.
- 3.

What is camouflage?

List the 5 types of camouflage and explain each one.

- 1.
- 2.
- 3.
- 4.
- 5.

Define descent with modification.

Define homologous structures and give one example.

Define vestigial structure and give one example.

What is a gene pool?

What is relative frequency?

Name the two main sources of genetic variation amongst organisms.

Explain the difference between single-gene traits and polygenic traits. What are the numbers of phenotypes possible for each trait?

Describe the 3 main types of selection that can affect the distribution of phenotypes of polygenic traits.

1.

2.

3.

What is genetic drift?

What is speciation and describe how a species evolves into two new species?

List the 3 types of isolating mechanisms and explain each one.

1.

2.

3.

Who are paleontologists?

What type of evidence does a fossil record show?

Define extinct.

Explain how a fossil is formed.

Explain the difference between relative and absolute dating.

What are index fossils?

What does fossil evidence show about evolution?