

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Life Science Notes 19  
Evolution and Natural Selection

# Evolution

## Causes

1. Natural Selection
2. Movement of individuals into and out of a population
3. Geographic isolation
4. Changes in climate

## Definition

Changes in the hereditary features of a population over time

Evolution happens very, very slowly over millions of years.

Humans have changed the environment faster than organisms can adapt.

## Evidence

1. fossil
2. vestigial structures
3. DNA
4. Embryology

DNA contains genes

Genes contain the information for life.

# Darwin's Theory of Evolution by Natural Selection

## 4 Principles

Natural Selection is not intentional!

Organisms produce more offspring than can survive

variations are found among individuals of a species.

Some variations help members in a population survive and reproduce more

Over time individuals ~~species~~ with helpful variations will appear more often in the population

## Variations

Caused by

mutations

Helpful variations are called

adaptations