

Charles Darwin, Evolutionary Thought

Chapter 15-2 and Part I of 15-3

Objectives: Students will

- A) Identify how 4 scientists' ideas contributed to Darwin's evolution theory.
- B) Summarize the key concepts behind natural selection
- C) List the three parts of Darwin's theory of Evolution by Natural Selection
- D) Summarize the meaning of each part of the Natural Selection theory.

Objective A) Summarize how 4 scientists' ideas contributed to Darwin's evolution theory.

Scientists #1 and 2 = _____

- _____ and _____ argued that the earth is many _____ of years old b/c layers of rock take time to form

What does this have to Darwin's theory of evolution?



Scientist #3 = _____

- _____ book on limits to _____ has strong impact (struggle for existence, preservation of good traits, loss of bad traits).

What does this have to Darwin's theory of evolution? _____

Scientist #4 = _____

- Letter outlines basic principles of _____.
- Spurs _____ into taking his ideas _____.

Objective A) Summarize how 4 scientists' ideas contributed to Darwin's evolution theory.



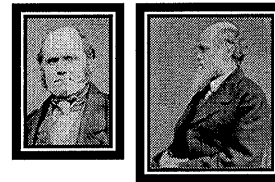
Darwin finally published his ideas in 1859 = _____

- Other naturalists were developing the same theory that Darwin did.
- Even though he was afraid of the Church's reaction to his book he wanted to get credit for his work.

B) Summarize the key concepts behind natural selection

- 1) All life is linked through a _____
- 2) Populations of living things _____ with time (_____)
- 3) The environment influences this change (_____ so that _____ traits are _____ over _____ traits
- 4) The helpful traits become more common in the population (_____).

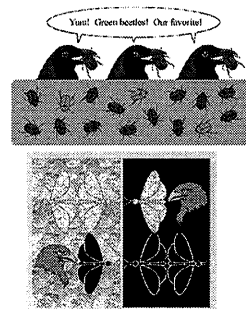
Charles Darwin



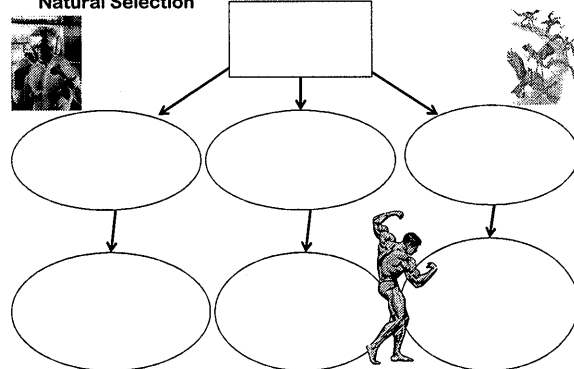
B) Summarize the key concepts behind natural selection

- The traits that help an organism _____ in a particular environment are " _____ " in _____.
- Better _____ = Better _____

Natural selection, in a nutshell:



C) List the three parts of Darwin's theory of Evolution by Natural Selection



D) Summarize the meaning of each part of the Natural Selection theory.

1. _____
 • _____ for _____
 and _____
2. _____
 • Ability to _____ and _____
 _____ = _____ rate
3. _____
 • Each living species has _____ with _____
 _____ from other species over time



D) Summarize the meaning of each part of the Natural Selection theory.

Given the following clues, identify which part of Darwin's theory of evolution through natural selection it identifies.

- 1. The Fastest Leopard
- 2. A mouse that blends into the environment
- 3. Limited algae
- 4. 2 Baby Lambs with white fur
- 5. 1 tree for 2000 birds
- 6. Longer neck on tortoises
- 7. Baby ducks with more feathers

B) Summarize the key concepts behind natural selection

Darwin's Theory of Evolution by Natural Selection

1. There is _____ within a population
2. Some variations are _____ (_____)
3. Not all young produced in a generation can _____
 - This leads to a _____

 - Those that _____ and _____
 are those with the good _____.

B) Summarize the key concepts behind natural selection -- Define the following words related to natural selection

Vocabulary Word	Link Word	Picture
Variation		
Mutation		
Adaptation		
Biodiversity		

Understanding Check

1. What part of Darwin's natural selection represents an organisms ability to survive and reproduce?
2. Which scientists argued that earth is millions of years old?
3. What will give a population of species more of a chance to survive?