

Name: _____ Date: _____

Life Science Notes 15
Lamarck v. Darwin

Early scientists studying evolution did not have a very good understanding of

genetics. The scientists of this time hypothesized that organisms
changed over time or, evolved, by looking at the
fossil record and differences between organisms.

Jean-Baptiste Lamarck

When did he live?

France

Occupation:

Soldier, naturalist,
scientist

Where did he do his work?

Le Jardin des Plantes
(Botanical Garden)
in France

Major Contributions to Science:

Theory: Inheritance of
Acquired Characteristics

- Lamarck believed that
traits acquired in ones
lifetime could be passed
to offspring.

Remember the
Giraffes!

Charles Darwin

When did he live?

England

Occupation:

naturalist, scientist

Where did he do his work?

Royal Navy aboard the
Hms Beagle
- Most of his important
findings occurred in part
at the Galapagos Islands

Major Contributions to Science:

Theory: Evolution by
natural selection

Variations exist
in a population
and only those
with helpful
variations survive
and pass on their
genes.

The Galapagos Finches



SCIENCEPHOTOLIBRARY

The finches of the Galapagos have become famous as the organism that led Darwin to his revolutionary theory on evolution. He noticed some very important things about the birds that led him to his conclusions.

1. There were 14 different species of finches.
2. Their beaks were different sizes and shapes.
3. Each species was able to exploit (take advantage of) a different food source because of differences in their beaks.

Darwin hypothesized that the birds had all descended from **one population** of finches that found its way to the island from the mainland. When they arrived at the Galapagos, food was scarce and the birds competed. Only the birds with helpful variations survived and over time, 14 different species were formed.