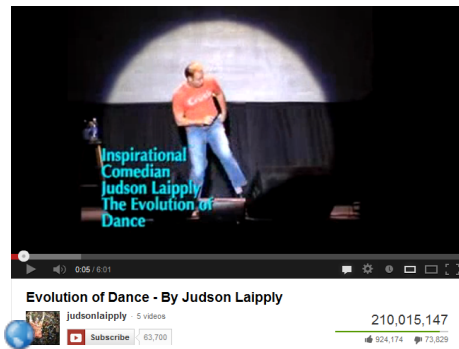


# EVOLUTION & ADAPTION?



Bird\_fishing\_with\_bread.mpeg



# QUIZ...How well do you know Easter Island?



**Charles Darwin**

Charles Robert Darwin, FRS was an English naturalist. He established that all species of life have descended over time from common ancestors, and proposed the scientific theory that this branching ... Wikipedia

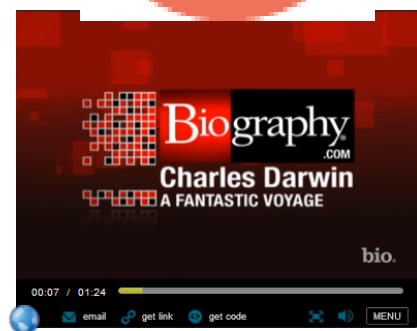

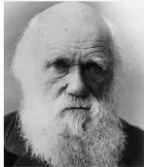
**Born:** February 12, 1809, [Shrewsbury](#)

**Died:** April 19, 1882, [Down House](#)

**Awards:** Copley Medal, Royal Medal, Wollaston Medal

**Education:** [University of Cambridge](#), [University of Edinburgh](#), [More](#)

**Children:** [Anne Darwin](#), [George Darwin](#), [Francis Darwin](#), [More](#)



Case Study - Darwin's Voyage.pdf

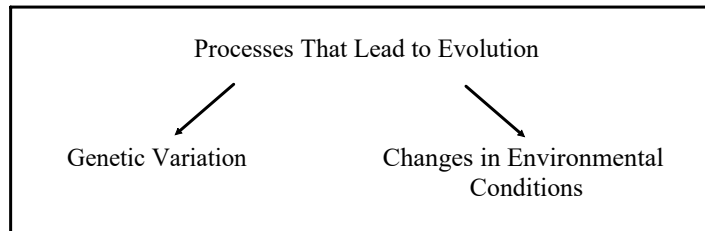


Notes - Biological Evolution, Adaptations and Natural Selection.pdf

## Biological Evolution, Adaptations and Natural Selection

(Draper - Page 83)

**biological evolution** - change in inherited characteristics of a population from generation to successive generation  
 - touted as the driving force of adaptation to environmental change



**genes** - segments of DNA found in chromosomes  
 - impart certain inheritable traits in organisms

**gene pool** - sum of all genes possessed by the individuals of a population

**mutations** - random and unpredictable changes in DNA molecules that can be transmitted to offspring  
 - can be caused by external environmental agents (X-rays, ultraviolet light) and toxic organic chemicals

**genetic variability** - result of millions of random changes in the DNA molecules of individuals in a population

**adaptation** - any genetically controlled characteristic (structural, physiological or behavioural) that enhances the chance for members of a population to survive and reproduce in their environment

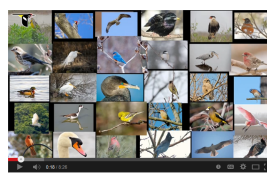
**structural adaptations** - coloration, mimicry, protective cover, gripping mechanisms

**physiological adaptations** - ability to poison prey, give off chemicals to repel predators, hibernate during cold weather

**behavioural adaptations** - migration, resource partitioning, species interactions (ie/parasitism)

**natural selection** - process by which the best adapted organisms survive and reproduce in a given environment

**speciation** - the formation of two or more species from one as the result of divergent natural selection in response to changes in environmental conditions



Speciation: An Illustrated Introduction

**extinction** - process by which a species is eliminated from existence when it cannot adapt genetically and reproduce successfully under new environmental conditions

## Attachments

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