

*Day 1 –*

# EVOLUTION: Everything Changes

*We're all just Pokémon after all*

# Objectives

- ▶ **State HOW and WHY “evolution” occurs**
- ▶ **Examine evidence and tools of it**
- ▶ **Understand how “evolution” applies to more than just life**
- ▶ ***Terms:***
  - ▶ Charles Darwin
  - ▶ Evolution
  - ▶ Natural Selection
  - ▶ Fossils
  - ▶ Extinct
  - ▶ Mutation
  - ▶ Trend

# *Remind Me...*

- ▶ **What is Anthropology?**
- ▶ **What type of “science” is it?**
- ▶ **How have societies changed over time? (what are some examples)**
- ▶ ***Do PEOPLE change too?***



# *But First...*

- ▶ Have you ever seen a movie with humans and dinosaurs living together?
  - ▶ *No, not like Lost World, but in the same TIME ancient time period...*
- ▶ What's wrong with this?
- ▶ HOW do we know?
- ▶ When did humans “begin” and how have we changed?
- ▶ NOTE: *The following is a “Theory” and like ALL theories, may one day change, and you are welcome to have your own!*



**Cornerstones**

# You Can't Darwin Them All

## ► Charles Darwin

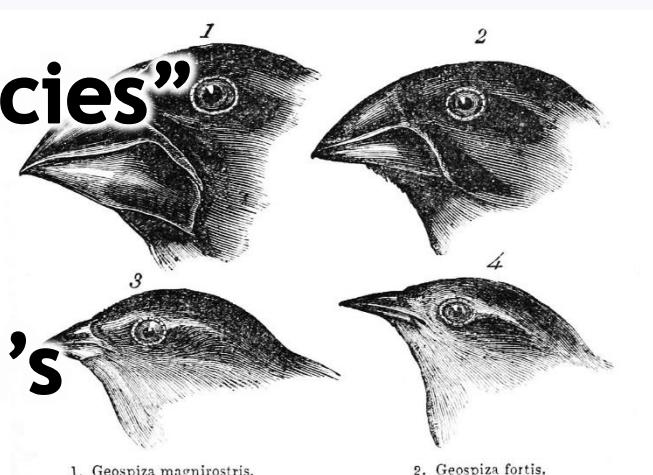
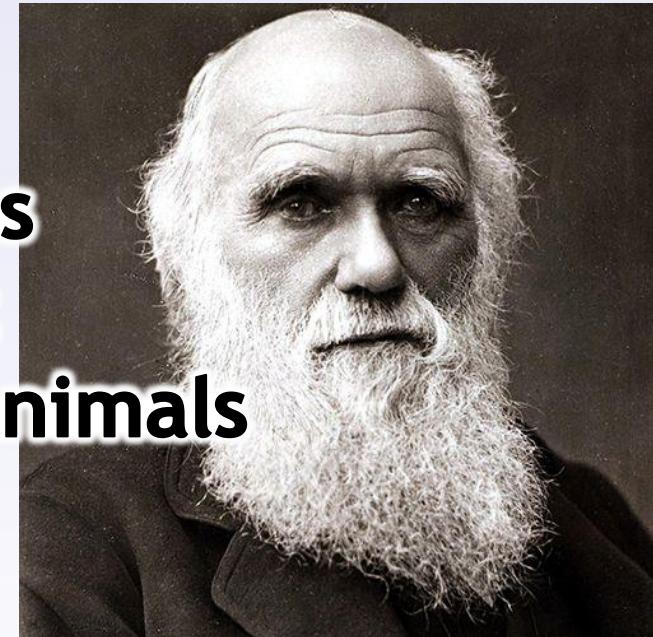
► While living on Galápagos Islands noticed different species and changes in animals

► Responsible for the “Theory of Evolution\*”

► Published “Origin of Species”

## ► \*Evolution

► A change in a population’s traits over time



1. *Geospiza magnirostris.*  
3. *Geospiza parvula.*

2. *Geospiza fortis.*  
4. *Certhidea olivacea.*

# Is It Natural?

- *One of Darwin's greatest contributions was the idea of Natural Selection*
- **Sometimes called “Survival of the Fittest”**
- **Some individuals adapt better to environment than others**
- **MORE LIKELY TO SURVIVE / THRIVE**
- *Think of which animals developed wings, venom, spikes, camouflage, or the spicy McChicken...*
- *Are there traits in humans that have helped US survive better?*



WHY ARE WE STOPPING TEENS  
FROM EATING TIDE PODS...



...WHEN THIS IS CLEARLY  
NATURAL SELECTION AT WORK?

NATURAL SELECTION



# The Twelve A-Fossils



► *But, what if species DON'T adapt?*

► **Extinct**

► **When a species dies out entirely**

► *Passenger pigeon, the dodo bird, and of course those giant lizard-like things...*

► *That's right, Godzilla!*

► **Fossil**

► **Preserved remains or traces of dead organisms**





**Found a fossil in my backyard.**



# Is This The X-Men?

- ▶ *But, what about adaptions that AREN'T helpful, or don't spread?*
- ▶ *Like color-blindness, extra fingers, or being a ginger ☺*
- ▶ **Darwin also recognized**  
**Mutations**
  - ▶ **Scientifically an error in DNA**
  - ▶ **But for Anthropologists this is also an adaptive change that is NOT carried on, or helpful... sorry Wolverine**





# What's Currently Trending?

- ▶ *But are BIOLOGICAL changes the only ways a species (like humans) change over time?*
- ▶ *Cats meow like a human baby's cry, crows give “gifts” to providers and protectors, and ducks have routes knowing where and when bread will be...*
- ▶ **Evolution is not JUST biological, but can also involve trends**
  - ▶ **A direction in which something is changing or developing**
  - ▶ **Like language, music, clothing, movies, social media, etc.**

SQUIRTLE  
L8



CHARMANDER  
L10



CHARMANDER

used EMBER!



# TECHNO



through



# TIME



# And so...

- ▶ *While Anthropologists study humans, their “subjects” have drastically changed over time*
- ▶ *These changes are biological, cultural, social, and often change how we look, act, and feel... and help us to survive and thrive*
- ▶ *Who knows what changes still await... and what will be “trending” tomorrow...*

music- The Story of My Life, by One Direction

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