

Mutation: it is the key to our evolution. It is how we have evolved from a single-celled organism into the dominant species on the planet. This process is slow, and normally taking thousands and thousands of years. **But every few hundred millennia, evolution leaps forward.**

Survival of the fittest: most likely to survive, reach maturity and reproduce then continue the cycle
Evolutionary adaptation occurs over a long period of time, not changing on the spot like Fantastic Four. Or Darwin. It's not environment want you to change, it's not a want. It just happens. But every few hundred millennia, the process leaps forward.

Natural Selection: Able to adapt to the environment because of the trait.

You adapt because YOU have the trait. YOU can change the world. Something motivational.

Acclimatize: a fancy word meaning get used to the climate.

Apparently Charles Darwin was NOT the first. ~~It was Charles Xavier.~~ It was his grandfather.

We are studying the Neo-Darwinism theory.

The many observations of Darwin

Observation 1: Organisms have a great potential to reproduce

Observation 2: There is a steady population (no exponential graph due to reproduction)

Observation 3: Environmental restrictions like limited resources such as food, water, light, appropriate habitat, presence of diseases and unfavourable environmental conditions.

Inference 1: Struggle for existence/survival

Observation 4: Variation within a population (because of pants, i mean genes)

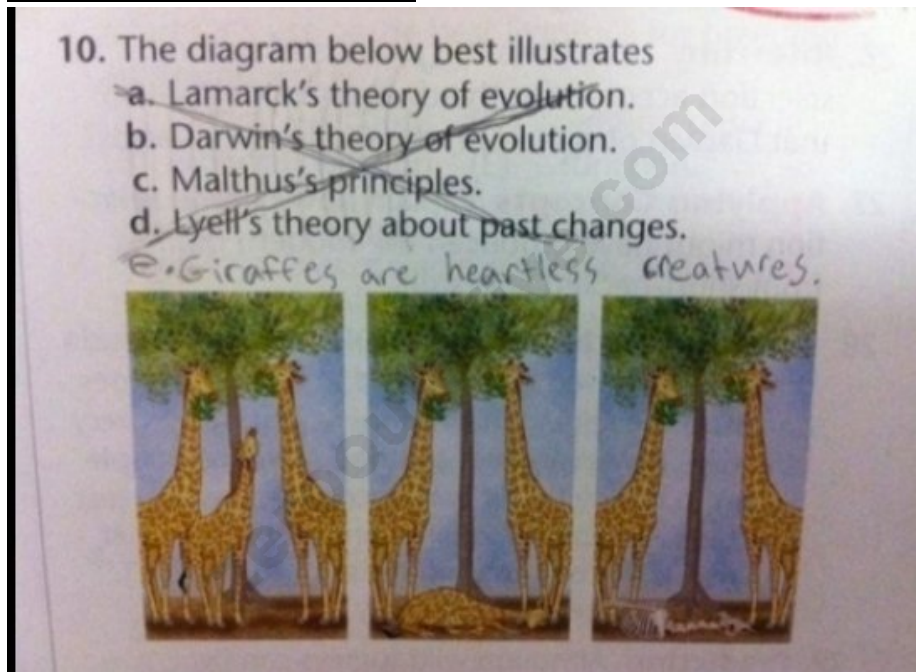
Inference 2: Survival of the fittest by natural selection (indiv with genetic variations best adapted, exerts a selection pressure)

Observation 5: Differential reproduction ie. like produces like

Acquired characteristics by Mr Lamark is not accepted now.

His theory was that giraffe's kept stretching their necks to eat the trees and thats why its long.

The rejected Lamarckian theory



Adapting is not change to survive, is do you have the trait to be able to survive in the environment and reproduce.

'Descent with modification'

Phenotype: What is being expressed eg. Brown eyes

Genotype: The dominant and recessive gene

Allele frequency: the thing in observation

Differential reproduction: different types of same species reproduce at a different rate

Dominant allele means that if you put B with B, it's B and if you put B with b it's still B. To get b, you need b with b.

^because this makes sense

Humans are diploid organisms. *we need you to hope again. stop it charles. I DONT WANT YOUR FEUCHAH!*

What evolution is not

1. It was not discovered by Charles Darwin
2. It

What evolution is

1. A idea that the new species develop from idk idk idk

Misconception

- Involves organism trying to adapt
- Gives organisms what they need
- Acts for the good of the species
- Fittest organism is the strongest
- Produces organisms perfectly suited for the environment
- About survival of the very fittest individuals in a population

Anatomical homology

Pentadactyl limbs

Humerus

Radius

Ulna

Carpals

Metacarpals

Phalanges

When we were foetus, we were all pigs or chickens. Your mum might have got an ultrasound and gone like oh gosh my babe looks like a babe fish oh dear.

Speciation: when the common ancestor thing branches out

The [fancy evolution tree thing](#): from the bottom up. one node is where speciation occurred.

‘Speciation Event’

We are gathered here today for the annual speciation event. Today, the sharks will split off, and be on their own. We bid our animalistic brothers farewell, and all the best in the future endeavours. Just keep swimming, my friends. And remember, fish are friends, not food.

cos i'm only “Humans and chimps are related because they share the same features”.
techically they have the same features. well we all have eyes, nose, mouth, ears

How did humans and sharks have a common ancestor? How did sharks even manage to get on land? What sort of of circumstance forced the sharks up to land? How did they even manage to survive more than 4 minutes out of water? Did they slowly mutate into whales? What happened to the gills?

SHARING SAME FEATURES DOES NOT CAUSE RELATEDNESS