

INSTANT
NEUTRAL - NO EFFECT

POSITIVE - HELPS ORGANISM SURVIVE
NEGATIVE - HURTS ORGANISM'S CHANCE OF SURVIVAL

RANDOM
MUTATIONS - CHANGE IN DNA

Natural Selection — Slow + NOT Random

requires 5 things if everyone is the same
no one can be better

1. Variation —
2. Selecting Pressure

- Predators
- Competition — Resources — Food

- water
- water
- water

3. Fitness

Surviving + reproducing

4. Struggle for existence
5. Heritable — THE TRAIT can be passed on (IN THE DNA)

(INHERITED)

GENETIC DRIFT - LUCKY SURVIVE

- DOES NOT produce adaptations
- REDUCES VARIATION (POSSIBLY)

RANDOM

BOTH GENETIC DRIFT + NAT. SELECTION

- HAPPEN TO POPULATIONS
- CHANGE FREQUENCY OF TRAITS

IN A POPULATION