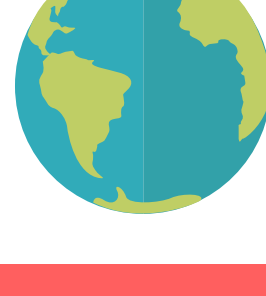


Evolution

Jessica O'Neill
Fundamentals of Bio Anth

✗ MYTHS
✓ FACTS

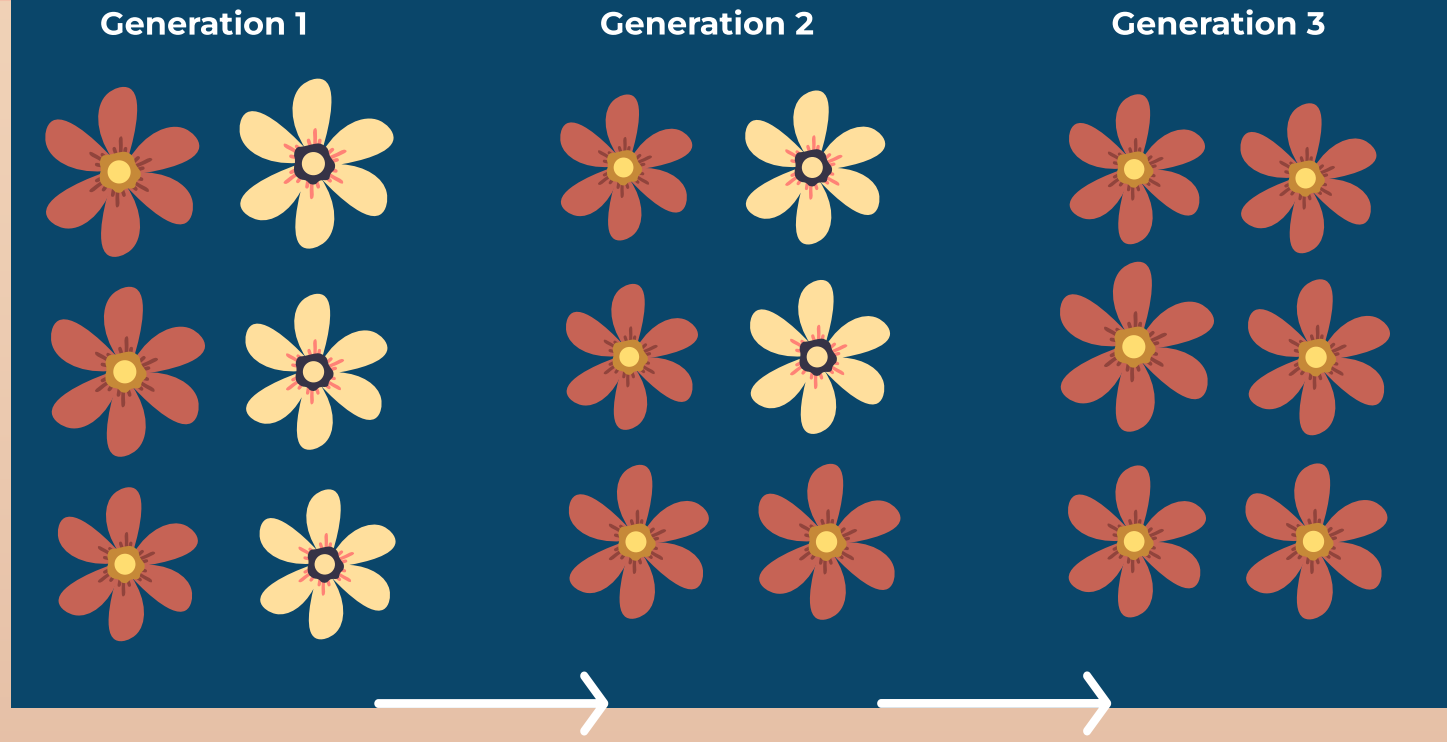


Evolution is a widely misunderstood topic. Here are some facts to help you sort through what you hear.

MYTH 1 > Evolution is synonymous with improvement

Evolutionary theory offers a naturalistic explanation for the diversity of life and is simply defined as a "change in allele frequencies over time."

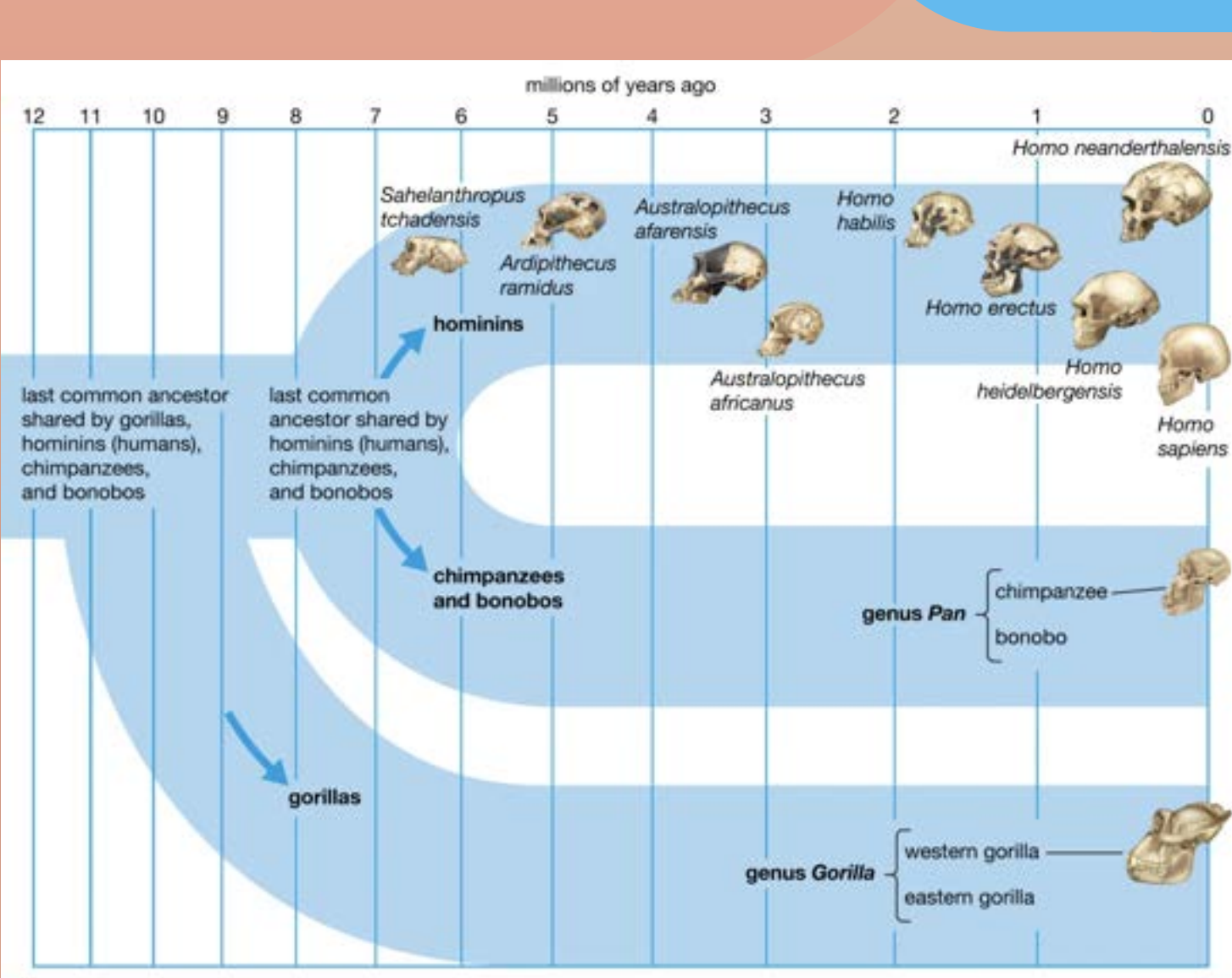
Evolution has *no end goal*



MYTH 2 > We evolved from monkeys

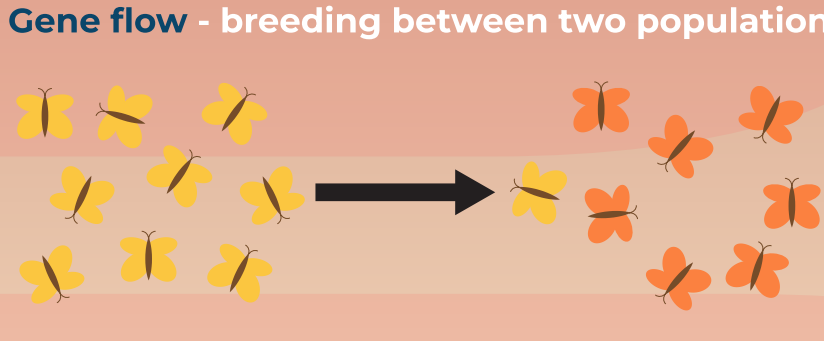
Evolution predicts that all life on the planet is related. If you go back enough generations, there will be a common ancestor for any two life forms. We did not evolve from monkeys; rather, we have a common ancestor that humans and monkeys diverged from millions of years ago.

Evolution is just like one big *family tree*



MYTH 3 > Natural selection is the only means of evolution

1 Gene flow - breeding between two populations

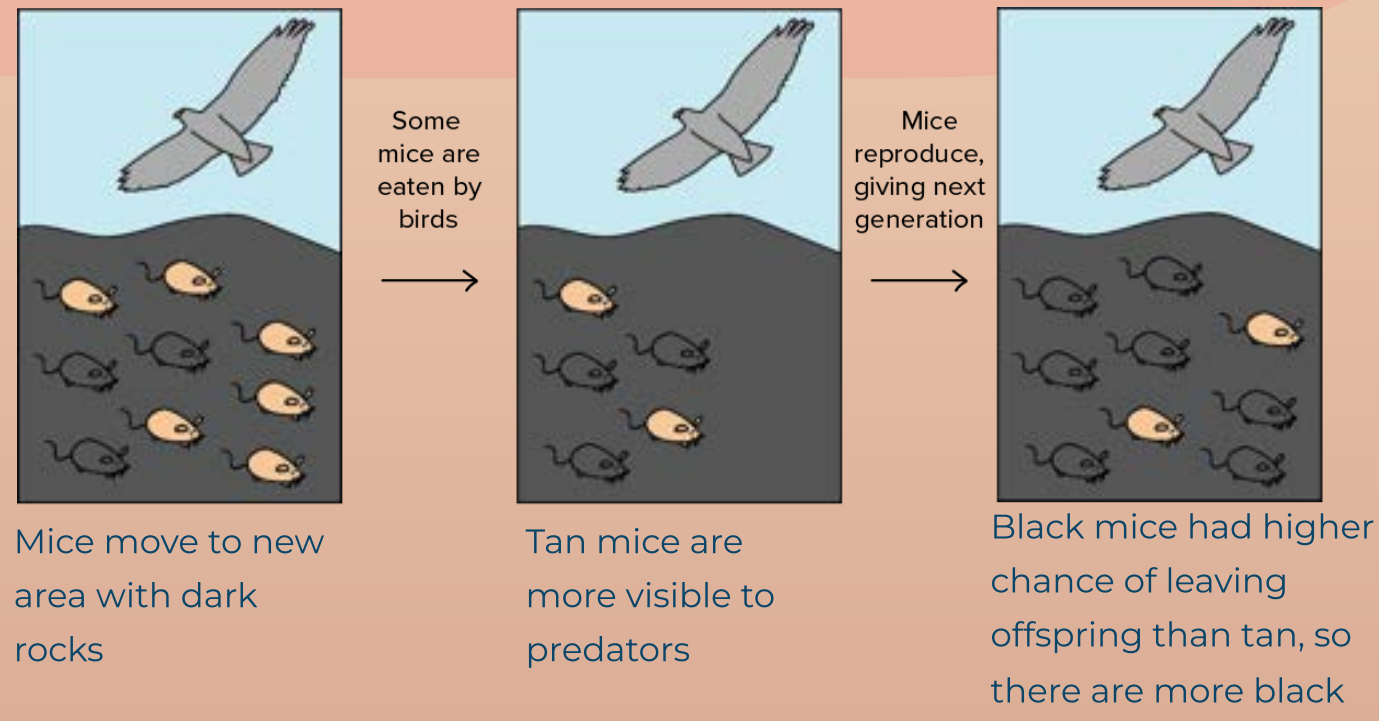


There are actually *four* forces of evolution

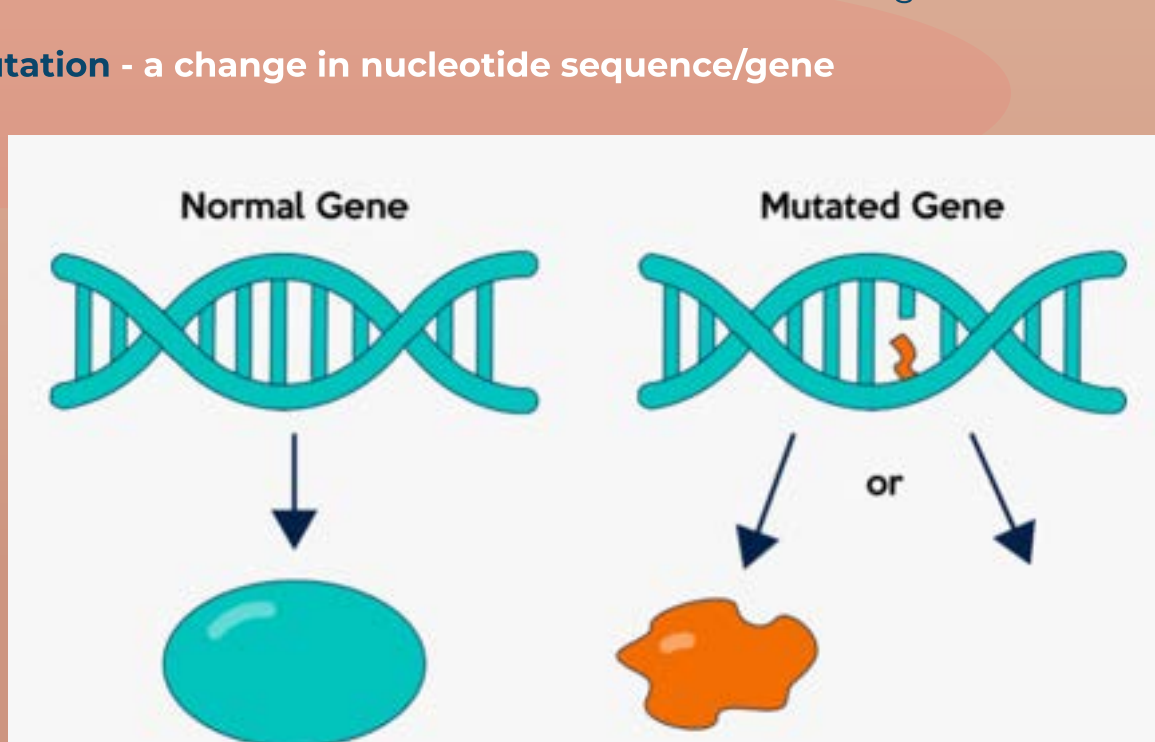
2 Genetic drift - completely random changes in the gene pool



3 Natural selection - the species that are able to make more offspring will be the one to continue



4 Mutation - a change in nucleotide sequence/gene

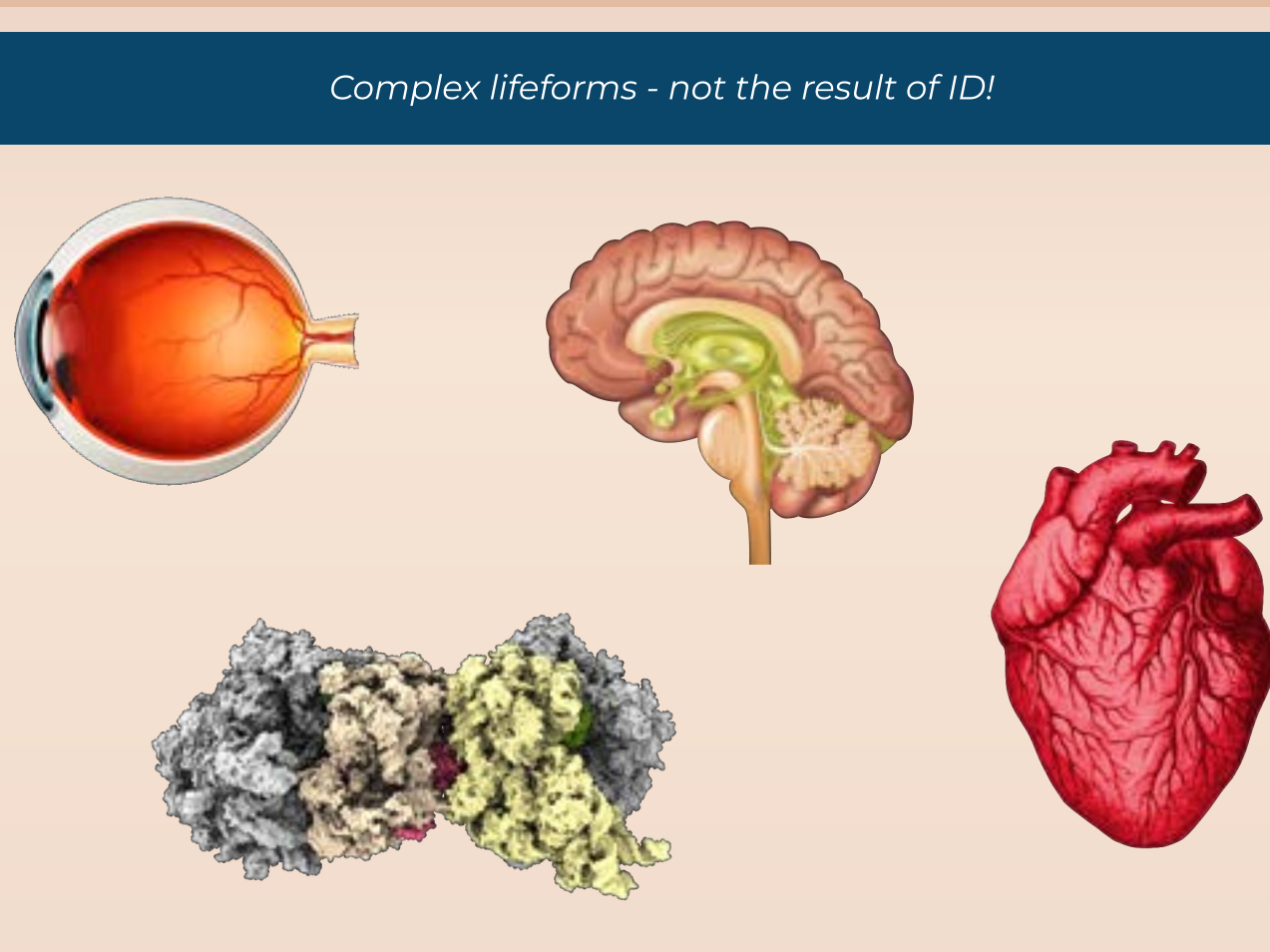


MYTH 4 > Intelligent design (ID) makes more sense than evolution

Intelligent design proposes that the lifeforms we see on earth are too complex to be the result of evolution

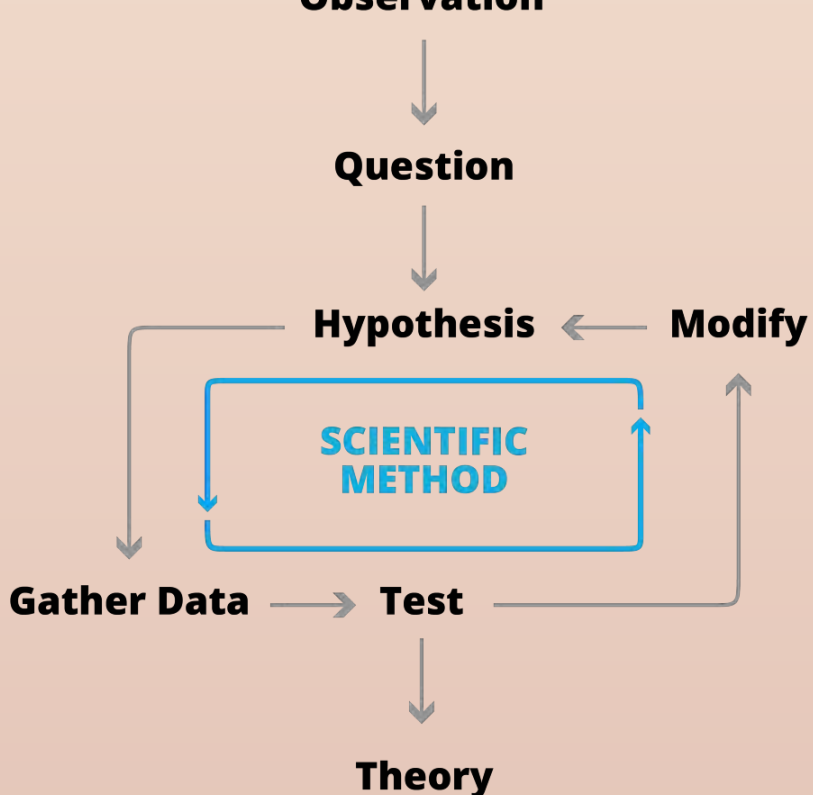
ID is *anti-science* - unsolved mysteries/answers in science prove nothing

Complex lifeforms - not the result of ID!



MYTH 5 > "Evolution is just a theory"

Evolution is a *well-supported* theory



This myth comes from a **lack of understanding** of the word "theory," which is actually structures of ideas that prove, explain, and interpret facts. **Theories** are widely supported by scientists due to rigorous testing.

Everything is not as it seems!

Don't believe everything you hear about evolution as misconceptions are widespread and hard to escape. Do research before blindly believing something you read, and always have an open mind!

Sources

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