

Source: [\[\[KBBIologyMasterIndex\]\]](#)

1 | Evolution

The unifying theory of all biology involving any change in the heritable traits in a population over a long period of time.

Causes of evolution – different reproduction rates – Environmental pressures – non-random mate choices – Migration

Evidence for evolution – Lab evidence of short-lifespan bacteria – Fossils and DNA evidence

1.1 | Begin by defining evolution

⇒ Descend with modification

Micro-evolution: changes in alleal frequency within a population from one generation to the next

Macro-evolution: descend of different species from a common ancestry over much longer timescales

*Remember: evolution happens over **deep time** — much longer than your monkey brain could feasibly preserved*

The size of civilization to now is about 10,000 years, which is 0.002 seconds if all history is 1 minute.