

Evolution Study Sheet

1. evolution Process by which species change over time, driven by natural selection and other mechanisms.
2. natural selection Mechanism of evolution where organisms with advantageous traits survive and reproduce.
3. adaptation Trait that increases an organism's fitness for its environment, developed through natural selection.
4. Charles Darwin English naturalist who proposed the theory of evolution by natural selection.
5. fossil record Collection of preserved remains and traces of past life used to study evolution.
6. homologous structures Similar structures in different species inherited from a common ancestor, indicating evolutionary relationships.
7. vestigial organs Structures in organisms with reduced or no function, suggesting evolutionary remnants.
8. speciation Formation of new species through reproductive isolation and genetic divergence.
9. embryology Study of embryo development providing evidence for evolutionary relationships.
10. biogeography Study of the distribution of species and ecosystems, influenced by historical and evolutionary factors.
11. comparative anatomy Comparison of anatomical structures across different species to study evolutionary relationships.
12. gene flow Movement of genes between populations, influencing genetic variation and evolution.
13. genetic drift Random changes in gene frequencies within a population, impacting evolution.
14. mutation Source of genetic variation resulting from changes in DNA sequences.
15. fitness Measure of an organism's reproductive success and survival in its environment.
16. convergent evolution Evolutionary process where unrelated species develop similar traits due to similar environmental pressures.
17. divergent evolution Evolutionary process where a common ancestor gives rise to diverse species adapted to different environments.
18. selective pressure Environmental factors influencing the survival and reproduction of organisms, driving natural selection.