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| **What will we be learning?****Year 12 Classification and Evolution** | **Why this? Why now?**Previous Learning Year 11 InheritanceFuture Learning Year 12 Patterns of inheritanceEnquiry ProcessesAnalyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:****Binomial system****Blood serum****Classification****Courtship behaviour** **DNA base sequence****DNA hybridisation****Hierarchy****Phylogenetic tree****Precipitate** |
| **What will we learn?*** About the biological classification of species
* About the binomial system of naming species and the advantage of such a system
* The features used to classify organisms into the five kingdoms: Prokaryotae, Protoctista, Fungi, Plantae, Animalia
* About the evidence that has led to new classification systems, such as the three domains of life, which clarifies relationships
* The relationship between classification and phylogeny
* The evidence for the theory of evolution by natural selection
* The different types of variation
* The different types of adaptations of organisms to their environment
* The mechanism by which natural selection can affect the characteristics of a population over time
* How evolution in some species has implications for human populations

**Misconceptions in this topic**Humans DID NOT ‘evolve from monkeys’ …we share a common ancestorMore complex organisation DOES NOT mean ‘more evolved’  |
| **What opportunities are there for wider study?**CareersEcology Forensics Horticulture Biochemistry Fisheries Work Agriculture Marine Biology Laboratory Work Teaching Biotechnology Veterinary Work Environmental science ZoologySTE(A)M https://highcliffe.sharepoint.com/sites/LearnSTEM |
| **How will I be assessed?**End of topic assessment PAG 12.1 Drosophila Crosses |