|  |  |  |
| --- | --- | --- |
| **What will we be learning?****Year 12 Nucleic Acids** | **Why this? Why now?**Previous Learning Future Learning Enquiry ProcessesAnalyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:****Adenine****Adenosine triphosphate** **Base****Base pair****Cytosine****Deoxyribose****DNA helicase****DNA polymerase****Guanine****Nucleotide** **Phosphorylation****Ribose****Semi-conservative replication** **Thymine****Uracil** |
| **What will we learn?*** That the structure of a nucleotide is a monomer from which nucleic acids are made
* About the synthesis and breakdown of polynucleotides by the formation and breakage of phosphodiesterbonds
* About the structure of ADP and ATP
* The structure of DNA (deoxyribonucleic acid) and how to purify DNA by precipitation
* Semi-conservative DNA replication
* The nature of the genetic code
* About the transcription and translation of genes resulting in the synthesis of polypeptides

**Misconceptions in this topic** |
| **What opportunities are there for wider study?**CareersForensics Biochemistry Medicine Laboratory Work Teaching Pharmacology Biotechnology Veterinary WorkSTE(A)M https://highcliffe.sharepoint.com/sites/LearnSTEM |
| **How will I be assessed?**End of topic assessment  |