

YEAR 11 CURRICULUM INFORMATION - Biology

|  | Autumn 1   | Autumn 2   |
|--|--|--|
| What will students be learning?                | Sexual and Asexual reproduction, Meiosis, Advantages and Disadvantages of reproduction, DNA and the genome, DNA structure, mutations, DNA extraction, Genetic inheritance, Inherited disorders, Genetic engineering, GM crops, Cloning   | Variation, Selective breeding, Theories of evolution, Natural selection, Speciation, Fossils, Extinction, Evidence for evolution, Evolutionary trees and classification  |
| How will students be assessed?                 | Weekly Knowledge Checks<br>Low stakes quiz in lessons<br>Exam Q practice<br>Mid topic milestone<br>End of topic milestone<br>Mock exams  | Weekly Knowledge Checks<br>Low stakes quiz in lessons<br>Exam Q practice<br>Mid topic milestone<br>End of topic milestone  |
| Literacy – What keywords will be taught?       | Sexual, asexual, clone, gamete, mitosis, meiosis, fertilisation, chromosome, gene, genome, protein synthesis, nucleotide, mutation, inheritance, allele, dominant, recessive, homozygous, heterozygous, genotype, phenotype, vector, natural selection, speciation, variation, fossil, extinction, variation, evolution, extinction, classification, resistance. | Sexual, asexual, clone, gamete, mitosis, meiosis, fertilisation, chromosome, gene, genome, protein synthesis, nucleotide, mutation, inheritance, allele, dominant, recessive, homozygous, heterozygous, genotype, phenotype, vector, natural selection, speciation, variation, fossil, extinction, variation, evolution, extinction, classification, resistance. |
| What employability skills are being developed? | Interpersonal skills<br>Group work<br>Logical and lateral thinking<br>Developing links between topics and ideas<br>Investigative skills<br>Analytical skills   | Interpersonal skills<br>Group work<br>Logical and lateral thinking<br>Developing links between topics and ideas<br>Investigative skills<br>Analytical skills   |
| Wider Curriculum Links?                        | Nursing<br>Gene therapy<br>Bioinformatics  | Nursing<br>Gene therapy<br>Bioinformatics  |

|  |   |   |
|--|---|---|
| <p>What useful websites are there for this topic?</p>  | <p>Save my Exams<br/>BBC Bitesize<br/>Seneca</p>  | <p>Save my Exams<br/>BBC Bitesize<br/>Seneca</p>  |
| <p>What wider reading could be done for this topic?</p>  | <p>BBC news – Medicine section</p>  | <p>BBC news – Medicine section</p>  |
| <p>What else can students be doing independently to develop their understanding of this topic?</p> | <p>Regularly reviewing work and topics completed in lessons<br/>Completing further reading around the topics covered<br/>Revise for milestone assessments<br/>Revise using mastery booklets weekly<br/>Practice mathematical skills such as range, mean, percentages and graph skills etc</p> | <p>Regularly reviewing work and topics completed in lessons<br/>Completing further reading around the topics covered<br/>Revise for milestone assessments<br/>Revise using mastery booklets weekly<br/>Practice mathematical skills such as range, mean, percentages and graph skills etc</p> |