

Triple Unit Overview – Inheritance, variation and evolution

Target grade for tests:



You will learn about:

- Reproduction, the formation of gametes and variation.
- The structure of DNA and how characteristics are inherited.
- Evolution and the evidence that supports it.

You will be able to:

- Evaluate theories and calculate the probability of inheriting specific characteristics.

<table border="1"> <tr> <td colspan="2">Key learning points</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Reproduction</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Meiosis</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Sex determination</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Structure of DNA</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Protein synthesis</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Inheritance</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Genetic engineering</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Cloning</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Variation</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Selective breeding</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Evolution</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Speciation</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Fossils and extinction</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Resistant bacteria</td> <td></td> <td></td> <td></td> </tr> </table>					Key learning points					Reproduction					Meiosis					Sex determination					Structure of DNA					Protein synthesis					Inheritance					Genetic engineering					Cloning					Variation					Selective breeding					Evolution					Speciation					Fossils and extinction					Resistant bacteria					<p style="text-align: center;">Key Words</p> <p>DNA, chromosome, genome, cell division, characteristic DNA, nucleus, gene, mutation, genotype phenotype breed Heterozygous Homozygous Allele Gamete Darwin Adaptation Splice Enzyme Variation Meiosis</p>	
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<p>Links to other subjects:</p> <p>SMSC</p> <ul style="list-style-type: none"> - Explain every day and technological applications of science; evaluate associated personal, social, economic and environmental implications; and make decisions based on the evaluation of evidence and arguments. - Appreciate the power and limitations of science and consider any ethical issues which may arise. <p>Literacy</p> <ul style="list-style-type: none"> - Use scientific vocabulary, terminology and definitions. - Make and record observations. - Present reasoned explanations including relating data to hypotheses. <p>Numeracy</p> <ul style="list-style-type: none"> - Make estimates and explain why they may be important. - Convert numbers from decimal to standard form, and vice versa. - Calculate probability of characteristics being inherited. 																																																																																	
Research	Note-making	Group work & discussion	Memorisation	Precision & accuracy	Independence	Reflection																																																																											