Edexcel International GCSE Biology 4BI1 Learning Plan

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| **Unit: 5. Variation and Selection** | | **Chapter: 18. Genes and Inheritance** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 3: Reproduction and inheritance**  **b)** Inheritance | **3.19** understand how genes exist in alternative forms called alleles which give rise to differences in inherited characteristics  **3.20** understand the meaning of the terms: dominant, recessive, homozygous, heterozygous, phenotype, and genotype  **3.21B understand the meaning of the term codominance.**  **3.22** understand that most phenotypic features are the result of polygenic inheritance rather than single genes  **3.23** describe patterns of monohybrid inheritance using a genetic diagram  **3.24** understand how to interpret family pedigrees  **3.25** predict probabilities of outcomes from monohybrid crosses  **3.26** understand how the sex of a person is controlled by one pair of chromosomes, XX in a female and XY in a male  **3.27** describe the determination of the sex of offspring at fertilisation, using a genetic diagram. | Video: Biology – Section 3 – Lesson 3 – Genetics and Inheritance (Part 1) – 06:28 to end. Biology – Section 3 – Lesson 4 – Genetics and Inheritance (Part 2) – beginning to 06:10  Powerpoint: Biology Section 3 – Lesson 3 – slides 26 to end. Biology Section 3 – Lesson 4 – beginning to slide 21  Textbook pages:  249 – Gregor Mendel  253 – Working out genotypes – the test cross  254 – Ways of presenting genetic information  256 – Codominance  256 – Sex determination  257 – Polygenic inheritance | Page 258 – 260 Qs. 1 to 10  Textbook Answers (PDF)  Chapter 18 - exam question - pdf  Chapter 18 - exam question mark scheme – pdf  Chapter 18 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Biology Student Book - Pearson (Bradfield and Potter)