Edexcel iGCSE Biology Checklist

Section E16: Chromosomes, Genes and DNA

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| ***I can***  | ☺ | 😐 | ☹ |
| understand that the nucleus of a cell contains chromosomes on which genes are located |  |  |  |
| understand that a gene is a section of a molecule of DNA and that a gene codes for a specific protein |  |  |  |
| describe a DNA molecule as two strands coiled to form a double helix, the strands being linked by a series of paired bases: adenine (A) with thymine (T), and cytosine (C) with guanine (G)  |  |  |  |
| understand that genes exist in alternative forms called alleles which give rise to differences in inherited characteristics |  |  |  |
| understand that many mutations are harmful but some are neutral and a few are beneficial  |  |  |  |
| understand that resistance to antibiotics can increase in bacterial populations, and appreciate how such an increase can lead to infections being difficult to control |  |  |  |
| understand that the incidence of mutations can be increased by exposure to ionising radiation (for example gamma rays, X-rays and ultraviolet rays) and some chemical mutagens (for example chemicals in tobacco). |  |  |  |
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