Edexcel iGCSE Biology 4BI0 Learning Plan

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| **Section F22: Genetic Modification** | | |
| Specification | Resources | Assessment |
| 5.12 describe the use of restriction enzymes to cut DNA at specific sites and ligase enzymes to join pieces of DNA together  5.13 describe how plasmids and viruses can act as vectors, which take up pieces of DNA, then insert this recombinant DNA into other cells  5.14 understand that large amounts of human insulin can be manufactured from genetically modified bacteria that are grown in a fermenter  5.15 evaluate the potential for using genetically modified plants to improve food production (illustrated by plants with improved resistance to pests)  5.16 understand that the term ‘transgenic’ means the transfer of genetic material from one species to a different species. | Video: Biology Section 5 – Lesson 2 – Selective Breeding and Genetic Engineering – 07:07 to end.  Powerpoint: Biology Section 5 Lesson 2 – Slides 18 to end.  Textbook: Ch.22 Genetic Modification  Page 235 – DNA – the stuff of genes  Page 235 – Recombinant DNA  Page 239 – Producing genetically modified plants  Page 242 – Producing genetically modified animals  Page 244 – End of Chapter Checklist  Chapter 22 – Genetic Modification - Student checklist.doc  DVD Revision check list  <http://biology-igcse.weebly.com/-genetic-engineering.html> | Textbook  Page 244 – Questions (1) to (4)  Textbook Answers (PDF)  Page 245-246 – End of section F Questions (1) to (5)  End of Section F Answers (PDF)  DVD Multiple choice test  Section F22 - exam question - pdf  Section F22 - exam question mark scheme – pdf  Talking paper video – Section F22 – Genetic Modification |

Videos – www.igcsesciencecourses.com

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

DVD Video Clips – see resource DVD in textbook.