



Granville  
Sports College



## GCSE Revision Topics 2016 - 2018

### Subject – Biology Combined Foundation

Topic	Tick/date when revised				
<b>B1 Cell Structure and Transport</b>					
B1.1 The world of the microscope					
B1.2 Animal and plant cells					
B1.3 Eukaryotic and prokaryotic cells					
B1.4 Specialisation in animal cells					
B1.5 Specialisation in plant cells					
B1.6 Diffusion					
B1.7 Osmosis					
B1.8 Osmosis in plants					
B1.9 Active transport					
B1.10 Exchanging materials					
<b>B2 Cell Division</b>					
B2.1 Cell division					
B2.2 Growth and differentiation					

B2.3 Stem cells					
B2.4 Stem cell dilemmas					
<b>B3 Organisation and the Digestive System</b>					
B3.1 Tissues and organs					
B3.2 The human digestive system					
B3.3 The chemistry of food					
B3.4 Catalysts and enzymes					
B3.5 Factors affecting enzyme action					
B3.6 How the digestive system works					
B3.7 Making digestion efficient					
<b>B4 Organising Animals and Plants</b>					
B4.1 The blood					
B4.2 The blood vessels					
B4.3 The heart					
B4.4 Helping the heart					
B4.5 Breathing and gas exchange					
B4.6 Tissues and organs in plants					
B4.7 Transport systems in plants					
B4.8 Evaporation and transpiration					

B4.9 Factors affecting transpiration					
<b>B5 Communicable Diseases</b>					
B5.1 Health and disease					
B5.2 Pathogens and disease					
B5.5 Preventing infections					
B5.6 Viral diseases					
B5.7 Bacterial diseases					
B5.8 Diseases caused by fungi and protists					
B5.9 Human defence responses					
<b>B6 Preventing and Treating Diseases</b>					
B6.1 Vaccination					
B6.2 Antibiotics and painkillers					
B6.3 Discovering drugs					
B6.4 Developing drugs					
<b>B7 Non-communicable Diseases</b>					
B7.1 Non-communicable diseases					
B7.2 Cancer					
B7.3 Smoking and the risk of disease					
B7.4 Diet, exercise and disease					

B7.5 Alcohol and other carcinogens					
<b>B8 Photosynthesis</b>					
B8.1 Photosynthesis					
B8.2 The rate of photosynthesis					
B8.3 How plants use glucose					
<b>B9 Respiration</b>					
B9.1 Aerobic respiration					
B9.2 The response to exercise					
B9.3 Anaerobic respiration					
B9.4 Metabolism and the liver					
<b>B10 The Human Nervous System</b>					
B10.1 Principles of homeostasis					
B10.2 The structure and function of the nervous system					
B10.3 Reflex actions					
<b>B11 Hormonal Co-ordination</b>					
B11.1 Principles of hormonal control					
B11.2 The control of blood glucose levels					
B11.3 Treating diabetes					
B11.5 Human reproduction					

B11.7 The artificial control of fertility					
<b>B13 Reproduction</b>					
B13.1 Types of reproduction					
B13.2 Cell division in sexual reproduction					
B13.4 DNA and the genome					
B13.7 Inheritance in action					
B13.8 More about genetics					
B13.9 Inherited disorders					
B13.10 Screening for genetic disorders					
<b>B14 Variation and Evolution</b>					
B14.1 Variation					
B14.2 Evolution by natural selection					
B14.3 Selective breeding					
B14.4 Genetic engineering					
B14.7 Ethics of genetic technologies					
<b>B15 Genetics and Evolution</b>					
B15.5 Evidence for evolution					
B15.6 Fossils and extinction					
B15.7 More about extinction					

B15.8 Antibiotic resistant bacteria					
B15.9 Classification					
B15.10 New systems of classification					
<b>B16 Adaptations, Interdependence and Competition</b>					
B16.1 The important of communities					
B16.2 Organisms in their environment					
B16.3 Distribution and abundance					
B16.4 Competition in animals					
B16.5 Competition in plants					
B16.6 Adapt and survive					
B16.7 Adaptation in animals					
B16.8 Adaptations in plants					
<b>B17 Organising and Ecosystem</b>					
B17.1 Feeding relationships					
B17.2 Materials cycling					
B17.3 The carbon cycle					
<b>B18 Biodiversity and Ecosystems</b>					
B18.1 The human population explosion					
B18.2 Land and water pollution					

B18.3 Air pollution					
B18.4 Deforestation and peat destruction					
B18.5 Global warming					
B18.7 Maintaining biodiversity					