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| Subject: **GCSE Biology Foundation Year 10 – AQA Foundation specification** |
| Group/ Year: **Year 10** |

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| Autumn 1 – Module 1 CELLS | Autumn 2 – Module 2 ORGANISATION | Spring 1 – Module 3 INFECTION & RESPONSE | Spring 2 – Module 4  BIOENERGETICS & HOMEOSTASIS | Summer 1 – Module 5  HOMEOSTASIS | Summer 2 – Module 5 HOMEOSTASIS, INHERITANCE, VARIATION & EVOLUTION |
| Cell structure   * Eukaryotes and prokaryotes * Animal and plant cells * Cell Specialisation * Cell * Differentiation * Culturing microorganisms   Required practical 1: Investigate the effect of antiseptics or antibiotics on bacterial growth  Cell division   * Chromosomes * Mitosis and the cell cycle   Transport in cells   * Diffusion * Osmosis * Required practical 2: Investigate the effect of salt or sugar solutions on plant tissue * Active transport   Assessment  End of topic test  Practical assessment | Principles of organisation   * Organisational hierarchy   Animal tissues, organs and organ systems   * The human digestive system   Required practical: Food Tests  Required practical 3: Investigate the effect of a factor on the rate of an enzyme-controlled  Reaction   * Blood * Coronary heart disease: a non-communicable disease * Health issues * The effect of lifestyle on some non-communicable diseases * Cancer   Plant tissues, organs and systems   * Plant tissues and organs * Plant Organ Systems   Assessment  End of Topic test | Communicable diseases   * Communicable (infectious) diseases * Viral diseases * Bacterial diseases * Fungal diseases * Protist diseases * Human defence systems * Vaccination * Antibiotics and painkillers * Discovery and development of drugs   Plant disease   * Detection and identification of plant diseases * Plant defence responses   Assessment  REVISION for  MOCK EXAMS | Photosynthesis   * Photosynthetic reaction * Rate of photosynthesis   Required practical 4: Investigate the effect of a factor on the rate of photosynthesis   * Uses of glucose from photosynthesis   Respiration   * Aerobic and anaerobic respiration * Response to exercise * Metabolism   New module HOMEOSTASIS  Homeostasis   * Principles of Homeostasis   The human nervous system   * Structure and function   Required practical 5: Investigate the effect of a factor on human reaction time   * The brain * The eye * Control of body temperature   Assessment  End of Topic test | Hormonal coordination in humans   * Human endocrine system * Control of blood glucose concentration * Maintaining water and nitrogen balance in the body * Hormones in human reproduction * Contraception   Plant hormones   * Control and coordination   Required practical 6: Investigate the effect of light on the growth of newly germinated shoots  INHERITANCE, VARIATION & EVOLUTION  Reproduction   * Sexual and Asexual reproduction   Meiosis   * Advantages & Disadvantages of Sexual and Asexual Reproduction   Assessment  End of Term test | Variation and evolution   * DNA and the genome * DNA structure * Genetic inheritance * Inherited disorders * Sex determination * Variation * Evolution * Genetic engineering * Cloning   Assessment  End of Topic test |