

Edexcel GCSE Biology – Revision Checklist

Revision Checklist (Edexcel GCSE)

B1: Cell Biology

■	Prokaryotic vs eukaryotic cells; cell ultrastructure	Notes
■	Microscopy (magnification, resolution, calculations)	Notes
■	Cell differentiation and specialisation	Notes
■	Cell division: mitosis stages and cell cycle	Notes
■	Stem cells: therapeutic uses, ethics	Notes

B2: Organisation

■	Digestive system organs and functions	Notes
■	Enzymes: lock-and-key, effects of temperature/pH, required practicals	Notes
■	Circulatory system: heart, blood vessels, blood components	Notes
■	Health issues: CHD, lifestyle factors	Notes
■	Plant tissues: xylem, phloem; transpiration and translocation	Notes

B3: Infection & Response

■	Pathogens: bacteria, viruses, fungi, protists	Notes
■	Body defences: skin, mucus, phagocytosis, antibodies	Notes
■	Vaccination: principles and herd immunity	Notes
■	Antibiotics & painkillers; antibiotic resistance	Notes
■	Drug development: preclinical/clinical trials	Notes

B4: Bioenergetics

■	Photosynthesis: equation, limiting factors, required practical	Notes
■	Respiration: aerobic vs anaerobic; energy uses	Notes
■	Metabolism and enzyme-controlled reactions	Notes

B5: Homeostasis & Response

■	Homeostasis concept and control systems	Notes
■	Nervous system: neurones, reflex arc	Notes
■	Endocrine system: hormones and target organs	Notes
■	Blood glucose control: insulin, glucagon	Notes
■	Menstrual cycle and fertility treatments	Notes

B6: Inheritance, Variation & Evolution

■	DNA structure and genome; chromosomes and genes	Notes
■	Mitosis vs meiosis; sexual/asexual reproduction	Notes
■	Genetics: alleles, Punnett squares, inherited disorders	Notes
■	Variation and natural selection; selective breeding	Notes
■	Evolution and speciation; extinction causes	Notes

B7: Ecology

■	Ecosystems: trophic levels, food chains/webs	Notes
■	Adaptations and interdependence	Notes
■	Sampling methods: quadrats, transects	Notes
■	Carbon and water cycles	Notes
■	Biodiversity, human impacts, conservation	Notes