



Education, Anywhere, Anytime

## OCR GATEWAY GCSE BIOLOGY EXAMINATION BOARD COVERAGE

TOPIC	HEADING	OCR GATEWAY KEYWORDS	OCR GATEWAY CORE	OCR GATEWAY ADDITIONAL	OCR GATEWAY EXTENSION
Adaptation, classification and evolution	Classification		Y		
Adaptation, classification and evolution	Adaptations to the environment	Countercurrent heat exchange, specialist, generalist	Y		
Adaptation, classification and evolution	Evolution by natural selection		Y		
Adaptation, classification and evolution	Speciation		Y		
Behaviour	Rhythms in plants and animals				
Behaviour	Behaviour and conditioning				
Behaviour	Communication and plant and animal interactions				
Behaviour	Human evolution				
Biotechnology	Introduction to working with microbes	Names of bacterial shapes			Y
Biotechnology	Making use of microbes	Brewing stages, distillation			Y
Biotechnology	Using enzymes in industry	Immobilisation			Y
Biotechnology	Genetic engineering	DNA fingerprinting			Y
Biotechnology	Biofuels				Y
Biotechnology	New technologies in biology				
Cell processes	Aerobic and anaerobic respiration	Respiratory quotient		Y	

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Cell processes	Diffusion, osmosis and active transport	Flaccid, plasmolysed, turgid, crenated, lysis		Y	
Cells and cell division	Cells			Y	
Cells and cell division	The microscope				
Cells and cell division	Cell division - mitosis			Y	
Cells and cell division	Cell division - meiosis			Y	
Cells and cell division	Cloning	Dolly the sheep		Y	
Cells and cell division	Stem cells	Gene switching		Y	
Cells and cell division	Growth and development	Growth curves, wet/dry mass, pituitary gland		Y	Y
DNA and genes	DNA, genes and the genetic code	Inc. Watson and Crick, base pairs		Y	
DNA and genes	Genetic modification	Gene therapy		Y	
Drugs	Developing new drugs		Y		
Drugs	Alcohol, cigarettes and health		Y		
Drugs	Drugs and their misuse		Y		
Ecosystems, cycles and energy flow	Energy and biomass in food chains	Saprophyte, inter/intra specific, niche, mutualism	Y		
Ecosystems, cycles and energy flow	Parasitism and mutualistic feeding relationships	Lifecycle, malaria	Y		
Ecosystems, cycles and energy flow	Decay and the carbon cycle		Y		
Ecosystems, cycles and energy flow	The nitrogen cycle		Y		
Farming and food security	Food security				
Farming and food security	Farming	Hydroponics, organic farming, biological control		Y	
Fieldwork	Fieldwork techniques in biology	Capture, recapture formula		Y	
Fieldwork	Fossil evidence for evolution				
Fieldwork	Soil	Sand, clay, loam, humus, worms			Y
Homeostasis	Homeostasis - balancing the internal environment		Y		
Homeostasis	Thermoregulation - balancing heat gain and loss		Y		
Homeostasis	Controlling blood sugar level and diabetes		Y		
Human impact on the environment	Pollution and environmental change	Carbon footprint	Y		
Human impact on the environment	Human impact on biodiversity				
Human impact on the environment	Sustainability	Whaling	Y		
Inheritance	Variation and inherited characteristics		Y		
Inheritance	Genetic disorders and genetic diagrams - OCR		Y		
Inheritance	Genes and inheritance		Y		

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Inheritance	Sex determination and sex-linked genetic disorders		Y		
Keeping healthy	Organ transplants	Immuno-suppressive drugs			Y
Keeping healthy	Pathogens and the body's defences against disease	Virus replication, impact of natural disasters on disease	Y		Y
Keeping healthy	Antimicrobial agents and microbial resistance		Y		Y
Keeping healthy	Harmful microbes, vaccination and immunity	Lister, Fleming	Y		Y
Keeping healthy	Diet	Human health and diet, EAR, BMI calculations, deficiency disease	Y		
Keeping healthy	Heart disease	Hole in the heart	Y		
Nerves and hormones	Hormones in our bodies		Y		
Nerves and hormones	Tropisms - hormone control of plant growth	Phototropism	Y		
Nerves and hormones	Uses of plant hormones				
Nerves and hormones	The nervous system	Eye and ear defects	Y		
Nerves and hormones	The reflex arc		Y		
Nerves and hormones	The synapse		Y		
Nerves and hormones	The brain and mind				
Nerves and hormones	Hormone control of the menstrual cycle				Y
Nerves and hormones	Controlling fertility				Y
Photosynthesis	The leaf and photosynthesis			Y	
Photosynthesis	Transpiration and plant transport	Factors affecting transpiration, minerals		Y	
Proteins and enzymes	Proteins	Q10 law		Y	
Proteins and enzymes	How proteins are made				
Proteins and enzymes	Enzymes	Inc. lock and key		Y	
Tissues, organs and organ systems	Effect of exercise on the body		Y		
Tissues, organs and organ systems	Cells, tissues, organs and organ systems			Y	
Tissues, organs and organ systems	Blood and circulatory system	SAN, AVN, ECG, Harvey, blood groups, transfusion		Y	
Tissues, organs and organ systems	Gas exchange and the lungs	Amphibians, fish, definitions (tidal volume, vital capacity, residual air etc) respiratory illness (asbestosis, cystic fibrosis, cancer)		Y	
Tissues, organs and organ systems	Digestive system and digestive enzymes			Y	
Tissues, organs and organ systems	The kidney and water balance				Y
Tissues, organs and organ systems	The skeleton and joints			Y	