

SB5 Health, disease and the development of medicines



Personal learning checklist | 1 of 3

GCSE Edexcel Separate Sciences | Biology Paper 1

Name _____ Class _____ Date _____

Tick one box for each statement. Red: need help. Amber: partly confident.
Green: can do independently.

I can	Red	Amber	Green
Health and disease evidence			
Define health and distinguish communicable diseases, non-communicable diseases and pathogens.	☐	☐	☐
Explain how one disease can increase susceptibility to another.	☐	☐	☐
Interpret disease-risk evidence, distinguishing correlation from causation and considering confounding factors.	☐	☐	☐
Lifestyle and cardiovascular disease			
Explain how diet, exercise, smoking and alcohol interact with other disease-risk factors.	☐	☐	☐
Explain malnutrition, nutrient deficiencies and excess energy intake.	☐	☐	☐
Calculate BMI and waist-to-hip ratio using correct units and explain their limitations.	☐	☐	☐
Explain how narrowed coronary arteries and blood clots affect heart muscle.	☐	☐	☐
Compare lifestyle changes, statins, stents and bypass surgery using benefits, risks and long-term care.	☐	☐	☐
Infection and transmission			
Identify the pathogens, effects and transmission of cholera and tuberculosis.	☐	☐	☐
Describe ash dieback and malaria, distinguishing pathogens from vectors and explaining transmission control.	☐	☐	☐
Compare HIV and chlamydia and explain reducing sexually transmitted infections.	☐	☐	☐

My next revision priority _____

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Personal learning checklist | 2 of 3

GCSE Edexcel Separate Sciences | Biology Paper 1

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I can	Red	Amber	Green
Defences and immunity			
Explain physical barriers and chemical defences, including skin, mucus, cilia, lysozyme and stomach acid.	☐	☐	☐
Explain antigen recognition, specific antibodies and pathogen removal by white blood cells.	☐	☐	☐
Explain memory lymphocytes and compare primary and secondary immune responses.	☐	☐	☐
Explain vaccination and interpret evidence about protection and antibody responses.	☐	☐	☐
Medicines and trials			
Explain why antibiotics target bacteria but not viruses and how resistance spreads.	☐	☐	☐
Describe discovery, development, preclinical testing and clinical trials of medicines.	☐	☐	☐
Explain random allocation, placebos and double-blind trials as ways to improve evidence.	☐	☐	☐
Evaluate medicines using efficacy, safety, dose and continuing monitoring.	☐	☐	☐

My next revision priority _____

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Personal learning checklist | 3 of 3

GCSE Edexcel Separate Sciences | Biology Paper 1

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I can	Red	Amber	Green
Viruses and plant defences			
Compare the lytic and lysogenic viral cycles.	☐	☐	☐
Explain physical and chemical plant defences and medicinal uses of plant chemicals.	☐	☐	☐
Evaluate plant-disease evidence and distinguish infection from environmental damage (Higher).	☐	☐	☐
Microbial cultures			
Explain aseptic culture methods, safe incubation and contamination controls.	☐	☐	☐
Plan antimicrobial-disc comparisons and interpret inhibition zones and experimental limitations.	☐	☐	☐
Calculate inhibition-zone areas, clear agar area and mean measurements.	☐	☐	☐
Immunisation and antibodies			
Evaluate immunisation benefits, risks and herd immunity.	☐	☐	☐
Describe hybridoma production, selection and cloning of monoclonal antibodies (Higher).	☐	☐	☐
Explain monoclonal antibody uses in pregnancy tests, diagnosis and targeted treatment (Higher).	☐	☐	☐

My next revision priority _____