



Biology – Year 11 Useful Links



4.6 Inheritance, Variation and Evolution

Reproduction and Genetics Video Playlist BBC Bitesize	Reproduction and genetics - GCSE Biology (Single Science) - BBC Bitesize
Reproduction, the genome and gene expression	Asexual reproduction - Reproduction, the genome and gene expression - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - DNA Part 1 Chromosomes & Genome (2026/27 exams) GCSE Biology - DNA Part 2 Alleles Phenotype vs Genotype (2026/27 exams) GCSE Biology - What is DNA? (Structure and Function of DNA) How are Proteins Made? Transcription & Translation GCSE Biology - What are DNA Mutations? (2026/27 exams) GCSE Biology - Mitosis Chromosomes Cell Division Cytokinesis (2026/27 exams) GCSE Biology - Meiosis (2026/27 exams) GCSE Biology - Sexual & Asexual Reproduction Gametes (2026/27 exams) GCSE Biology - Pros and Cons of Sexual and Asexual Reproduction (Part 2) (2026/27 exams)
Genetic Inheritance	Genetic inheritance - Genetic inheritance - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Genetic Diagrams Punnett Squares (2026/27 exams) GCSE Biology - Genetic Diagrams Punnett Squares (2026/27 exams) GCSE Biology - Family Trees / Family Pedigrees (2026/27 exams) GCSE Biology - Inherited Disorders Polydactyly Cystic Fibrosis (2026/27 exams) GCSE Biology - Gregor Mendel and the History of Genetics (2026/27 exams)
Variation	Variation - Variation - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Variation and Evolution (2026/27 exams) GCSE Biology - Selective Breeding (2026/27 exams) GCSE Biology - Genetic Engineering GMO (2026/27 exams)
Evolution	Principles of evolution by natural selection - Evolution - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Fossils & Extinction (2026/27 exams)

Classification of living systems	Classification of living organisms - Classification of living organisms - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Classification Systems Linnaean System (2026/27 exams)
Inheritance, variation and evolution podcasts	GCSE Science podcasts - Inheritance, variation and evolution - BBC Bitesize
Sample Exam Questions – inheritance variation and evolution	Multiple choice questions - Sample exam questions - inheritance, variation and evolution - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize
Physics and Maths Tutor – Infection and Response – Detailed Notes, Flashcards, Mind Maps, Exam Questions	AQA GCSE Biology Topic 6: Inheritance, Variation and Evolution Revision - PMT
Bitesize Quizzes (select relevant topic e.g. Variation”)	Quizzes - GCSE Biology (Single Science) - BBC Bitesize
Free Science Lessons – Variation and Evolution Playlist	GCSE Biology Revision "Variation"

4.7 Ecology

Note: Some of Ecology topic was covered in Year 10

Adaptations, interdependence and competition	Communities - Adaptations, interdependence and competition - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Abiotic & Biotic Factors (2026/27 exams) GCSE Biology - Competition & Interdependence (2026/27 exams)
Organisation of an Ecosystem	Communities - Adaptations, interdependence and competition - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Food Chains & Predator-Prey Cycles (2026/27 exams) GCSE Biology - How Humans Reduce Biodiversity (2026/27 exams)
Decomposition	How the rate of decay affects key factors - Decomposition - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Carbon Cycle & Water Cycle (2026/27 exams) GCSE Biology - Maintaining Biodiversity Reducing Environment Impact (2026/27 exams) GCSE Biology - Global Warming Greenhouse Effect Explained (2026/27 exams) GCSE Biology - Deforestation & Land Use (2026/27 exams)
Trophic Levels in an Ecosystem	Trophic levels - Trophic levels in an ecosystem - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize GCSE Biology - Trophic Levels - Producers, Consumers, Herbivores & Carnivores (2026/27 exams) GCSE Biology - Pyramids of Biomass (2026/27 exams)
Food Production (Triple)	What factors affect food security? - Food production - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize
Ecology Podcasts	GCSE Science podcasts - Ecology - BBC Bitesize
Sample Exam Questions - Ecology	Multiple choice questions - Sample exam questions - ecology - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize

Physics and Maths Tutor – Ecology – Detailed Notes, Flashcards, Mind Maps, Exam Questions	AQA GCSE Biology Topic 7: Ecology Revision - PMT
Bitesize Quizzes (select relevant topic e.g. Communicable diseases activity 1")	Quizzes - GCSE Biology (Single Science) - BBC Bitesize
Free Science Lessons – Ecology Playlist	GCSE Biology Revision "Competition and Interdependence"

Year 11 Biology Commonly Misspelt Words: Spelling List

Key Word	Definition
Allele	Different versions of genes
Archaea	Primitive bacteria living in extreme environments
Chromosome	Structures made of DNA, found in the nucleus
Classification	The process of putting things (organisms) into groups
Cystic fibrosis	A genetic disorder of cell membranes that is caused by a recessive allele
Embryo	The early developmental stage after fertilisation, a bunch of cells
Extinction	When there are no remaining individuals of a species still alive
Fertilisation	When sperm and egg cells fuse together
Gametes	Sex cells e.g. sperm, egg, pollen
Genotype	The alleles present that determines characteristics
Heterozygous	If the two alleles are different
Homozygous	If two alleles are the same
Interdependence	Within a community each species depends on each other for food, shelter, pollination, seed dispersal etc.
Linnaeus	Carl Linnaeus classified living things into groups based on their structure and characteristics
Meiosis	The process of cell division to create gametes
Phenotype	The physical characteristic that is expressed as a result of genes
Phylum	A level of organisation in Linnaeus classification system
Polydactyly	A genetic disorder caused by a dominant allele that leads to extra fingers or toes
Recessive	An allele that is only expressed if two copies are present
Woese	Carl Woese developed a three-domain system when evidence of internal structures and biochemistry was better understood