

Year 10 Science

Use the resources below to support you when learning from home. You can use this to help catch up on missed work, to get that extra help you might need, revise for exams or to show to your family what you have been learning about at school!

Year 10 - Timeline	Biology Topic	Links to learning
Autumn Term 1a	Key Concepts	https://classroom.thenational.academy/lessons/prokaryotic-and-eukaryotic-cells-6cr6ae https://classroom.thenational.academy/lessons/order-of-magnitude-calculations-75k34d https://classroom.thenational.academy/lessons/microscopes-magnification-and-resolution-6mr38d https://classroom.thenational.academy/lessons/using-the-microscope-and-magnification-equation-c5k66r https://classroom.thenational.academy/lessons/digestive-enzymes-6dqkgr https://classroom.thenational.academy/lessons/investigating-enzymes-60w64t https://classroom.thenational.academy/lessons/ph-and-enzymes-part-1-cru3jt https://classroom.thenational.academy/lessons/ph-and-enzymes-part-2-75h3gr
Autumn Term 1b	Key Concepts Cells & Control	https://classroom.thenational.academy/lessons/diffusion-61jker https://classroom.thenational.academy/lessons/osmosis-6wu3jd https://classroom.thenational.academy/lessons/osmosis-required-practical-part-1-70r6cr https://classroom.thenational.academy/lessons/osmosis-required-practical-part-2-6gtk0d https://classroom.thenational.academy/lessons/active-transport-6mtk2r https://classroom.thenational.academy/lessons/cell-cycle-and-mitosis-60r30t https://classroom.thenational.academy/lessons/stem-cells-and-the-use-of-stem-cells-69gkac
Spring Term 2a	Cells & Control Genetics	https://classroom.thenational.academy/lessons/the-nervous-system-6rt64e https://classroom.thenational.academy/lessons/reflex-arcs-6hhp4r https://classroom.thenational.academy/lessons/meiosis-and-fertilisation-60u3ed https://classroom.thenational.academy/lessons/genes-dna-and-chromosomes-71gk6d https://classroom.thenational.academy/lessons/genetic-inheritance-higher-c5jk4t https://classroom.thenational.academy/lessons/sex-determination-crup8t
Spring Term 2b	Genetics Natural Selection	https://classroom.thenational.academy/lessons/variation-and-natural-selection-part-1-ccv3at https://classroom.thenational.academy/lessons/variation-and-natural-selection-part-1-ccv3at https://classroom.thenational.academy/lessons/evolution-and-extinction-cnk3gd

		https://classroom.thenational.academy/lessons/evolution-and-extinction-cnk3gd https://classroom.thenational.academy/lessons/genetic-engineering-part-1-64v3gt
Summer Term 3a	Natural Selection Health & Disease	https://classroom.thenational.academy/lessons/genetic-engineering-part-2-cngkqd https://classroom.thenational.academy/lessons/classification-ccup2c https://classroom.thenational.academy/lessons/infectious-disease-6wu3ce https://classroom.thenational.academy/lessons/viral-and-bacterial-disease-68v3at
Summer Term 3b	Health & Disease	https://classroom.thenational.academy/lessons/non-communicable-disease-75jk6r https://classroom.thenational.academy/lessons/immunity-cnk3ad https://classroom.thenational.academy/lessons/heart-disease-61k68d https://classroom.thenational.academy/lessons/vaccines-70u6cc https://classroom.thenational.academy/lessons/antibiotics-6gv62c

Year 10 - Timeline	Chemistry Topic	Links to learning
Autumn Term 1a	States of matter & mixtures, atomic structure	https://classroom.thenational.academy/lessons/solids-liquids-and-gases-cmr36d https://classroom.thenational.academy/lessons/atoms-elements-and-compounds-6cv3ge https://classroom.thenational.academy/lessons/mixtures-filtration-and-crystallisation-60u38e https://classroom.thenational.academy/lessons/separation-by-distillation-75jk2r https://classroom.thenational.academy/lessons/separation-by-chromatography-69j3jr https://classroom.thenational.academy/lessons/atomic-structure-6crk8d https://classroom.thenational.academy/lessons/development-of-the-atomic-model-6crp2t https://classroom.thenational.academy/lessons/isotopes-ccwp4c https://classroom.thenational.academy/lessons/electron-configuration-and-the-periodic-table-61jp4c https://classroom.thenational.academy/lessons/periodic-table-development-6cwp8t https://classroom.thenational.academy/lessons/water-safe-to-drink-60r3gc
Autumn Term 1b	Bonding, chemical changes (acids/alkalis)	https://classroom.thenational.academy/lessons/ionic-bonding-introduction-70wk4c https://classroom.thenational.academy/lessons/further-ionic-bonding-6cu32c https://classroom.thenational.academy/lessons/properties-of-ionic-compounds-6hj66c https://classroom.thenational.academy/lessons/covalent-bonding-65hpcc https://classroom.thenational.academy/lessons/simple-covalent-molecules-70v66e https://classroom.thenational.academy/lessons/the-giant-covalent-structures-c5h3cc https://classroom.thenational.academy/lessons/giant-covalent-structures-graphene-68rp6e https://classroom.thenational.academy/lessons/metallic-bonding-cdjk0e

Spring Term 2a	Chemical changes, key concept calculations	https://classroom.thenational.academy/lessons/acid-base-reactions-cqt66t https://classroom.thenational.academy/lessons/observations-from-acid-base-reactions-68w36d https://classroom.thenational.academy/lessons/making-salts-crw68c https://classroom.thenational.academy/lessons/acids-alkalis-and-the-ph-scale-chj38c https://classroom.thenational.academy/lessons/relative-formula-mass-ft-only-64r3cc https://classroom.thenational.academy/lessons/balancing-equations-using-moles-ht-only-6gwkar https://classroom.thenational.academy/lessons/reacting-masses-ht-only-69jk4d https://classroom.thenational.academy/lessons/concentration-6rr6cc
Spring Term 2b	Chemical changes (electrolysis)	https://classroom.thenational.academy/lessons/electrolysis-of-molten-compounds-cgw66t https://classroom.thenational.academy/lessons/extraction-of-aluminium-68w38r https://classroom.thenational.academy/lessons/electrolysis-of-solutions-cmv3qe https://classroom.thenational.academy/lessons/electrolysis-review-c4w38r
Summer Term 3a	Extraction metals, equilibrium	https://classroom.thenational.academy/lessons/investigating-the-reactivity-of-metals-cmu32e https://classroom.thenational.academy/lessons/displacement-reactions-of-metals-c5hk6r https://classroom.thenational.academy/lessons/life-cycle-assessments-6dhkae https://classroom.thenational.academy/lessons/the-importance-of-recycling-75gk2t
Summer Term 3b	Extraction metals, equilibrium	https://classroom.thenational.academy/lessons/reversible-reactions-70r3gd https://classroom.thenational.academy/lessons/le-chateliers-principle-effect-of-changing-concentration-and-temperature-6cv68t https://classroom.thenational.academy/lessons/le-chateliers-principle-effect-of-changing-pressure-70rkat https://classroom.thenational.academy/lessons/le-chateliers-principle-uses-in-industry-60w3gd

Year 10 - Timeline	Physics Topic	Links to learning
Autumn Term 1a	Forces and motion	https://classroom.thenational.academy/lessons/speed-c5jp4t https://classroom.thenational.academy/lessons/distance-time-graphs-68rp8c https://classroom.thenational.academy/lessons/acceleration-60r3ar https://classroom.thenational.academy/lessons/velocity-time-graphs-6wr3gr https://classroom.thenational.academy/lessons/terminal-velocity-75hkec https://classroom.thenational.academy/lessons/acceleration-rpa-part-1-6xhp2c

		https://classroom.thenational.academy/lessons/acceleration-rpa-part-2-c4v3gr https://classroom.thenational.academy/lessons/stopping-distance-6wvk4c https://classroom.thenational.academy/lessons/newtons-laws-c9k3at https://classroom.thenational.academy/lessons/momentum-64r6ad https://classroom.thenational.academy/lessons/collisions-and-car-safety-crwkce
Autumn Term 1b	Forces and motion Conservation of energy	https://classroom.thenational.academy/lessons/moments-and-levers-cmrk4r https://classroom.thenational.academy/lessons/moments-and-gears-c8vp8t https://classroom.thenational.academy/lessons/energy-transfers-64upac https://classroom.thenational.academy/lessons/the-kinetic-energy-store-6thpad https://classroom.thenational.academy/lessons/the-gravitational-potential-store-crr6ar https://classroom.thenational.academy/lessons/conservation-of-energy-71gk6c https://classroom.thenational.academy/lessons/the-elastic-potential-store-70u62t https://classroom.thenational.academy/lessons/efficiency-and-reducing-unwanted-energy-transfers-61jker https://classroom.thenational.academy/lessons/non-renewable-energy-resources-6rupcd https://classroom.thenational.academy/lessons/renewable-energy-resources-ccu6cr
Spring Term 2a	Waves	https://classroom.thenational.academy/lessons/wave-properties-60vk0d https://classroom.thenational.academy/lessons/calculations-with-waves-6xh66e https://classroom.thenational.academy/lessons/measuring-the-speed-of-waves-in-water-69k3jd https://classroom.thenational.academy/lessons/measuring-the-speed-of-waves-in-solids-c9gk6t https://classroom.thenational.academy/lessons/measuring-the-speed-of-waves-in-solids-c9gk6t https://classroom.thenational.academy/lessons/sound-64u3gt https://classroom.thenational.academy/lessons/ultrasound-and-seismic-waves-cckrge
Spring Term 2b	Light and the electromagnetic spectrum	https://classroom.thenational.academy/lessons/electromagnetic-spectrum-part-1-6dk62r https://classroom.thenational.academy/lessons/electromagnetic-spectrum-part-2-c9h3cr https://classroom.thenational.academy/lessons/infrared-60u3cd https://classroom.thenational.academy/lessons/reflection-60v3ad https://classroom.thenational.academy/lessons/refraction-cmr64c https://classroom.thenational.academy/lessons/lenses-70r6cd

		https://classroom.thenational.academy/lessons/colour-c4w3je https://classroom.thenational.academy/lessons/black-body-radiation-c9j38c
Summer Term 3a	Light and the electromagnetic spectrum Radioactivity	https://classroom.thenational.academy/lessons/exploring-inside-an-atom-c9h6ac https://classroom.thenational.academy/lessons/isotopes-and-ionisation-crrk8c https://classroom.thenational.academy/lessons/history-of-atomic-models-c8wk2t https://classroom.thenational.academy/lessons/radioactivity-6tgkjc
Summer Term 3b	Radioactivity Space (Separate)	https://classroom.thenational.academy/lessons/decay-equations-crup6d https://classroom.thenational.academy/lessons/activity-and-half-life-ht-c9jk6d https://classroom.thenational.academy/lessons/hazards-of-radiation-physics-only-c5j6ad https://classroom.thenational.academy/lessons/uses-and-hazards-of-radiation-combined-science-only-74uk6d https://classroom.thenational.academy/lessons/uses-of-radiation-physics-only-cdh3qt https://classroom.thenational.academy/lessons/fission-and-fusion-70tk6c https://classroom.thenational.academy/lessons/solar-system-6dh36r https://classroom.thenational.academy/lessons/orbits-cmv6ad https://classroom.thenational.academy/lessons/life-cycle-of-a-star-6ctket https://classroom.thenational.academy/lessons/origins-of-the-universe-70rp8t https://classroom.thenational.academy/lessons/cosmic-microwave-background-radiation-cmbr-74tkcd