Greenwood School Curriculum Summary

Subject: Science (Mock revision and physics)

Year: 11 & XGB

Term: Spring 1

Lesson name	Lesson outline	Online link(s)	Other Resources
Mock revision (Biology)	You will revise: *cells and their specialisations, microscopes, movement of substances, cell division, uses of stem cells, substances in our food, enzymes and digestion, the circulatory system, non-communicable diseases, plants and their transport system, infectious diseases in animals and plants, immunity and vaccines, testing new drugs, photosynthesis, types of respiration and metabolism.*	https://classroom.thenational.academy/units/cell-biology-b859 https://classroom.thenational.academy/units/organisation-2345https://classroom.thenational.academy/units/organisation-2345 https://classroom.thenational.academy/units/infection-and-response-4f71	
Mock revision (Chemistry)	You will revise: *Atoms, elements and compounds, chemical formulae, separation techniques, isotopes, electronic configuration, the Periodic Table and its groups, types of bonding, structures of carbon, chemical calculations,* metal reactivity, and displacement reactions, acids and alkalis, making salts, electrolysis, endothermic and exothermic reactions and bond energies.	https://classroom.thenational.academy/units/atomic-structure-and-periodic-table-c831 https://classroom.thenational.academy/units/bonding-structure-and-the-properties-of-matter-e93f https://classroom.thenational.academy/units/quantitative-chemistry-4db7 https://classroom.thenational.academy/units/chemical-changes-a5ba https://classroom.thenational.academy/units/energy-changes-b607	
Mock revision (physics)	You will revise: *particle models, density, latent heat, pressure, energy transfers, types of energy, specific heat capacity, renewable and non-renewable energies, electrical circuits and their components, atomic structure and radioactivity.*	https://classroom.thenational.academy/units/particle-model-of-matter-a6d5 https://classroom.thenational.academy/units/energy-c750 https://classroom.thenational.academy/units/electricity-f083 https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/physics	
Drawing electric circuits	You will be reviewing the common circuit symbols seen in GCSE electrical circuit diagrams. We will also explore how to draw electrical circuits.	https://classroom.thenational.academy/lessons/drawing-electrical-circuits-c9hpcc	
Charge and current	You will learn what electrical current is, how to measure it in a circuit and how to calculate the value of the electrical current using charge and time.	https://classroom.thenational.academy/lessons/charge-and-current-64r36t	

Potential difference	You will learn about potential difference including how to measure it and how to calculate it using the energy transferred and charge flow.	https://classroom.thenational.academy/lessons/potential-difference-74tk4c	
Electrical resistance	You will explore the concept of electrical resistance. We will also learn about factors that will affect the current in a series circuit and we will learn how to use the equation V=IR.	https://classroom.thenational.academy/lessons/electrical-resistance-6wvk4t	
Resistance of a wire	You will explore how to measure the current of a component. We will also study Required Practical 3, measuring the resistance of a wire.	https://classroom.thenational.academy/lessons/resistance-of-a-wire-69h64d	
Series circuits	You will be learning about how current, potential difference and resistance behave in series circuits. We will also be applying Ohm's Law to solve simple problems.	https://classroom.thenational.academy/lessons/series-circuits-6wrpad	
Parallel circuits	You will be learning about how current and potential difference behave in parallel circuits. We will also be using Ohm's Law to solve simple questions and you will be consolidating our knowledge of series and parallel circuits. We will also be learning about cells in series and parallel.	https://classroom.thenational.academy/lessons/parallel-circuits-68w3ct https://classroom.thenational.academy/lessons/series-and-parallel-circuits-69jk8c	
Properties of components	You will be learning about how to measure the resistance of a fixed resistor and we will be exploring I-V graphs and you will be learning about the relationship between current, potential difference and resistance in a filament lamp. We will also be looking at its I-V graph.	https://classroom.thenational.academy/lessons/properties-of-resistors-6nhp2c https://classroom.thenational.academy/lessons/filament-lamps-71j34r https://classroom.thenational.academy/lessons/diodes-6gtpcr https://classroom.thenational.academy/lessons/light-dependent-resistors-chhk8c https://classroom.thenational.academy/lessons/thermistors-cgr68d	
Review of electrical circuits	You will be consolidating our learning so far, including our knowledge of current, potential difference and resistance and electrical components.	https://classroom.thenational.academy/lessons/review-of-electrical-circuits-6gv3gc	
Domestic electricity	You will be learning about the differences between direct and alternating current. We will also learn about mains electricity, and the 3 pin plug.	https://classroom.thenational.academy/lessons/domestic-electricity-c4rp8t	
Electrical power	You will be learning about electrical power and how to calculate it using current, potential difference and resistance and you will be linking power to energy transferred electrically and reviewing the energy transfers that take place in electrical appliances.	https://classroom.thenational.academy/lessons/electrical-power-part-1-6hjk6r https://classroom.thenational.academy/lessons/electrical-power-part-2-cgvkjc	
The National Grid	You will be learning about the National Grid and why it is an efficient way to transmit electricity across the country.	https://classroom.thenational.academy/lessons/the-national-grid-c4rp6t	
Domestic electricity review	You will be reviewing the ideas of electricity in the home, power and the national grid. We will also be looking at synoptic style questions.	https://classroom.thenational.academy/lessons/domestic-electricity-review-c4wpcc	