

September 2021

Grade 9-1 AQA Synergy Year 11 Revision Planner 2021-22

27/09/2021		
Biology	Chemistry	
Cells - Eukaryotic Light microscopes - Cells in animals and plants - AQA Synergy - GCSE Combined Science Revision - AQA Synergy pages 1,2,3 and 4 <i>Educake 1</i> Educake	Recall the differences elements, compounds & mixtures Pure substances and mixtures - Mixtures - AQA - GCSE Combined Science Revision - AQA Trilogy page 189	
Cells - Prokaryotic Light microscopes - Cells in animals and plants - AQA Synergy - GCSE Combined Science Revision - AQA Synergy pages 4-6 <i>Educake 2</i> Educake	Define endothermic and exothermic reactions Reaction profiles - Energy, rates and reactions - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Name group 1, 7 & 0 + transition metals on the Periodic Table Group 0 - Groups in the periodic table - AQA Synergy - GCSE Combined Science Revision - AQA Synergy page 210 <i>Explain the physical & chemical properties of metals</i> Properties of metals - Metals - AQA Synergy - GCSE Combined Science Revision - AQA Synergy	

October 2021

Physics

Models of the atom & alpha scattering experiment. Electron transition

page 366

[Developing models of atoms - Atomic structure - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

[Absorption and emission - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

Recall the different particles of the atom and their properties

page 367

[Structure of the atom - Atomic structure - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

Recall the different types of radiation and their properties.

[Nuclear radiation - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

How to calculate activity and half life.

[Half-life - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

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04/10/2021

Biology

Communicable and non-communicable Diseases

[Health and disease - Lifestyle and health - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

pages 1,2,3

[Educake 3](#)

[Educake](#)

Body Defences and treatments

Chemistry

Explain and describe the reactivity of group 1 metals

[Group 1 - Groups in the periodic table - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

page 210

Recall how the periodic table was developed

Physics

Atomic mass, number & nuclear equations.

[Radioactive decay - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

Ionising radiation, irradiation, contamination and protection.

[Contamination and irradiation - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy](#)

Cancer: Cause and cure.

<p>Non-specific defence systems - Preventing, treating and curing diseases - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 1,2,3,4 Educake 4 Educake</p>	<p>Mendeleev's periodic table - The periodic table - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Locate the metals and non-metals on the Periodic Table</p> <p>Metals versus non-metals - The periodic table - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Explain what alloys are</p> <p>Alloys - Metals and alloys - AQA - GCSE Combined Science Revision - AQA Trilogy</p>	<p>Ionising radiations - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>What is cancer? - Radiation and risk - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Page 377 Revise all wave properties - longitudinal and transverse</p> <p>Properties of waves - Waves - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pg 416</p> <p>Recall all parts of the EM Spectrum and their uses</p> <p>Electromagnetic waves - Waves - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pg417</p>
11/10/2021		
<p>Biology</p> <p>Hormones in humans</p> <p>Reproductive hormones - Reproduction and fertility - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 1,2 Educake</p>	<p>Chemistry</p> <p>Describe the reaction when we add a metal and acid</p> <p>Reactions of acids with metals - Acids and alkalis - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Revise atomic structure</p>	<p>Physics</p> <p>Energy Resources:</p> <p>Be able to recall the main energy resources used for generating electricity/ transport and heating, with advantages and disadvantages</p> <p>Types of energy resource - Energy resources - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p>

<p>Menstrual cycle and contraception</p> <p>Reproductive hormones - Reproduction and fertility - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 2,3</p> <p>Educake 5&6</p> <p>Educake</p>	<p>Structure of the atom - Atomic structure - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>page 182</p> <p>Revise conservation of mass</p> <p>Law of conservation of mass - Calculations in chemistry - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Compare simple molecules & giant covalent structures</p> <p>Giant covalent structures - Covalent bonding - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>page 190</p>	<p>Pg326-327</p> <p>Energy stores and transfers: Recall the main energy stores and describe an energy transfer</p> <p>All equations for calculating energy</p> <p>Energy change calculations - Energy resources - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Reduce unwanted energy transfer.</p> <p>Preventing unwanted energy transfers - Energy resources - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Use/complete Sankey diagrams and calculate efficiency using the equation</p> <p>Energy efficiency - Energy resources - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Pg318 - 319</p>
18/10/2021		
<p>Biology</p> <p>Respiration and the lungs</p> <p>Levels of organisation - Exchange surfaces and transport systems - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 2,3,4</p> <p>Educake 7</p> <p>Educake</p> <p>The heart and blood vessels</p> <p>Levels of organisation - Exchange surfaces and transport systems - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 5,7,8</p>	<p>Chemistry</p> <p>Revise properties of ionic substances.</p> <p>Go through whole chapter:</p> <p>Forming ions - Ionic compounds - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Describe covalent bonding</p> <p>Covalent bonds - Covalent bonding - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Describe the properties of simple covalent compounds</p>	<p>Physics</p> <p>Properties of magnets / magnetic materials</p> <p>Describe/draw shape of field lines around a bar magnet and the Earth and describe the interaction between Plotting compasses and a magnetic field</p> <p>Magnets - Magnetism and electromagnetism - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pg426</p>

<p>Educake 8</p> <p>Educake</p>		<p>Properties of small molecules and polymers - Covalent bonding - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>How does temperature affect the rate of reaction</p> <p>Rates and temperature - Rates of reaction - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>page 258</p>		<p>Revise the effects of a "current carrying wire", the magnetic field it can produce and how to change the strength of the magnetic field.</p> <p>Electricity and magnetism - Magnetism and electromagnetism - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Explain what a solenoid is and how it is useful in everyday life.</p> <p>Electromagnets - Magnetism and electromagnetism - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pg427</p>	
25	26	27	28	29	30
Half term	Use this time to catch up on any topics you may be behind on				Half term

November 2021

01/11/2021		
Biology	Chemistry	Physics
<p>Relationships and factors</p> <p>Levels of organisation - Ecosystems and biodiversity - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 1,2,3,4,5</p> <p>Sampling techniques and Classification</p> <p>Levels of organisation - Ecosystems and biodiversity - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>pages 6,7</p> <p>Classification - Evolution - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p>	<p>How does concentration affect the rate of reaction</p> <p>Rates, concentration and pressure - Rates of reaction - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Page 258</p> <p>How does surface area affect the rate of reaction</p> <p>Rates and surface area to volume ratio - Rates of reaction - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Page 258</p> <p>Revise rates experiments</p> <p>Required practical - investigate the rate of reaction by colour change - Rates of reaction - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Page 258</p> <p>Revise electrolysis</p> <p>Electrolysis of molten salts - Electrons and chemical reactions - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>page 240</p>	<p>Differences between Scalar and Vector quantities with examples</p> <p>Difference between weight and mass including equation</p> <p>Mass and weight - Energy changes - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Contact/ Non-Contact and Resultant forces.</p> <p>Contact and non-contact forces - Forces - AQA Synergy - GCSE Combined Science Revision - AQA Synergy</p> <p>Pg386</p>

08/11/2021		
Biology	Chemistry	Physics
Recap week 1 cells Recap week 2 Diseases	Revise the pH scale Acidic and alkaline solutions - Acids and alkalis - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Revise metallic bonding Structure and bonding in metals - Metals - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Recall how to calculate the mean Mean - Mean, median, mode and range - KS3 Maths Revision Practice drawing graphs Constructing a line graph - Obtaining, analysing and evaluating results - WJEC - GCSE Physics (Single Science) Revision - WJEC Learn that solids have a high density and gases have the lowest density Solids, liquids and gases - States of matter - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Density - States of matter - AQA Synergy - GCSE Combined Science Revision - AQA Synergy	Force on a spring - Hooke's law equation Elastic deformation - Energy changes - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Energy stored in the spring - be able to use the equation Sketch the graph of Force against extension Energy stored in a spring - Energy changes - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Pg387 Motion: Speed and distance v Velocity and displacement Speed and velocity - Motion - AQA Synergy - GCSE Combined Science Revision - AQA Synergy All motion equations Pg396 Distance time graphs and Velocity time graphs Distance-time graphs - Motion - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Pg397

15/11/2021		
Biology	Chemistry	Physics
Recap week 3 Hormones Recap week 4 Respiration and the Heart	Revise the sub-atomic particles (learn the table off by heart!!) Structure of the atom - Atomic structure - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Write down quick step by steps on how to make crystals Making soluble salts from insoluble substances - Acids and alkalis - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Practice drawing atoms	Newton's 3 laws: Definitions including the equation that goes with the 2 nd law. Newton's first law - Newton's laws - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Pg406 Stopping Distances including factors affecting stopping distances Stopping distances - Newton's laws - AQA Synergy - GCSE Combined Science Revision - AQA Synergy Work done equation. Pg407 Motion Under free fall

	<p> Electronic structure - The periodic table - AQA Synergy - GCSE Combined Science Revision - AQA Synergy </p> <p> Learn the definition for an isotope Isotopes - Atomic structure - AQA Synergy - GCSE Combined Science Revision - AQA Synergy </p>	<p>Be able to explain an object's motion as it falls, using Newton's 1st & 2nd law and the phrase "terminal velocity"</p> <p> Free fall - Motion - AQA Synergy - GCSE Combined Science Revision - AQA Synergy pg397 </p>
22/11/2021		
Mocks Begin		