

## Science – Higher Tier

Below is a 6-week revision plan that will support your revision in the lead up to your PPE in March.

For each week there is a Educake quiz set for Biology, Chemistry and Physics. Regardless of who your normal teachers are, the Biology quiz will be set by Mr Rooke, the Physics quiz by Mr Nicholls and the Chemistry quiz, Mr Miles.

The topics covered in each quiz are detailed below. For each week there is also a BBC bitesize link and some video links that will support your revision and help you to complete the quiz.

Each quiz should take you around 10-15 minutes. You should complete a Biology, Chemistry and Physics quiz each week. Aim to score at least 80%. You can repeat the quiz as many times as you like. Educake also provides you with study slides which can be used to support your revision.

If you are not able to get logged onto Educake you must speak to or email your Science teacher so they can reset your password.

Please remember you should also be using some of the below strategies and the Science topic lists to prepare for your PPE.

- Read, Cover, Write, Check,
- Flashcards
- Mind maps

If you need support with any revision strategies please speak to your Science teacher.

## Biology

<b>Week</b>	<b>Educake Quiz</b>	<b>BBC Bitesize link</b>	<b>Youtube video</b>
<b>w/c 15<sup>th</sup> Jan</b>	Quiz 1 – Hormones, Diabetes and Menstrual Cycle	<a href="#">Human endocrine system - Coordination and control - The human endocrine system - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Biology Revision "The Endocrine System" (youtube.com)</a>  <a href="#">GCSE Biology Revision "The Menstrual Cycle" (youtube.com)</a>  <a href="#">GCSE Biology Revision "Control of Blood Glucose Concentration" (youtube.com)</a>
<b>w/c 22<sup>nd</sup> Jan</b>	Quiz 2 –Respiration and gas exchange surfaces	<a href="#">Blood - Cellular respiration and transport - Edexcel - GCSE Combined Science</a>	<a href="#">GCSE Biology Revision "Respiration" (youtube.com)</a>

		<a href="#">Revision - Edexcel - BBC Bitesize</a>	<a href="#">Pearson Edexcel (9-1) GCSE Combined Science and GCSE Biology practical - rate of respiration (youtube.com)</a>
w/c 29 <sup>th</sup> Jan	Quiz 3 - Photosynthesis	<a href="#">What is photosynthesis? - Photosynthesis - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Biology Revision "Photosynthesis" (youtube.com)</a>  <a href="#">(32) GCSE Biology Revision "Required Practical 6: Photosynthesis" - YouTube</a>  <a href="#">Pearson Edexcel (9-1) GCSE Combined Science &amp; GCSE Biology core practical - light and photosynthesis (youtube.com)</a>
w/c 5 <sup>th</sup> Feb	Quiz 4– Carbon cycle linked with biotic and abiotic factors.	<a href="#">The carbon cycle - Natural cycles and decomposition - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>  <a href="#">The effect of abiotic factors on organisms - Adaptations, interdependence and competition - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>  <a href="#">The effect of biotic factors on organisms - Adaptations, interdependence and competition - Edexcel - GCSE Combined Science</a>	<a href="#">GCSE Biology Revision "The Carbon Cycle" (youtube.com)</a>

		<a href="#">Revision - Edexcel - BBC Bitesize</a>	
<b>w/c 12<sup>th</sup> Feb</b>	Quiz 5 – Nitrogen cycle	<a href="#">The nitrogen cycle - Natural cycles and decomposition - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">(32) The Nitrogen Cycle   Environmental Chemistry   Chemistry   FuseSchool - YouTube</a>
<b>w/c 19<sup>th</sup> Feb</b>	Go back through your week 1-5 Educake quizzes and repeat the one that you scored the lowest on. Use the BBC bitesize links and the video link from that week to support.		

## Chemistry

<b>Week</b>	<b>Educake Quiz</b>	<b>BBC Bitesize link</b>	<b>Youtube video</b>
<b>w/c 15<sup>th</sup> Jan</b>	Quiz 1 – Atomic Structure	<a href="#">Structure of the atom - Atomic structure - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Physics - Atomic Structure, Isotopes &amp; Electrons Shells #32 (youtube.com)</a>
<b>w/c 22<sup>nd</sup> Jan</b>	Quiz 2 – Covalent Bonding and structure	<a href="#">Substances with many covalent bonds - Giant covalent substances - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Chemistry - Properties of Simple Molecular Substances &amp; Giant Covalent Structures #17 (youtube.com)</a>
<b>w/c 29<sup>th</sup> Jan</b>	Quiz 3 - Group 1 and Group 7	<a href="#">Groups in the periodic table - GCSE Combined Science - BBC Bitesize</a>	<a href="#">GCSE Chemistry - Halogens and Noble Gases #12 (youtube.com)</a>
<b>w/c 5<sup>th</sup> Feb</b>	Quiz 4 – Rates of reactions	<a href="#">What is a rate of reaction? - Rates of reaction - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Chemistry - Rates of Reaction #46 (youtube.com)</a>
<b>w/c 12<sup>th</sup> Feb</b>	Quiz 5 – Exothermic and Endothermic	<a href="#">Endothermic and exothermic reactions - Heat energy changes in chemical reactions - Edexcel -</a>	<a href="#">GCSE Chemistry - Exothermic and Endothermic</a>

		<a href="#">GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">Reactions #43 (youtube.com)</a>
w/c 19 <sup>th</sup> Feb	Quiz 6 – Fractional distillation and crude oil	<a href="#">Crude oil and hydrocarbons - Fuels - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Chemistry - Crude Oil and Fractional Distillation #53 (youtube.com)</a>

## Physics

Week	Educake Quiz	BBC Bitesize link	Youtube video
w/c 15 <sup>th</sup> Jan	Quiz 1 – Kinetic energy and Resultant forces	<a href="#">Calculating energy changes - Transferring energy - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Physics - Resultant Forces &amp; Free Body Diagrams #42 (youtube.com)</a>
w/c 22 <sup>nd</sup> Jan	Quiz 2 – Investigating Resistance – Core practical	<a href="#">Required practical - investigate current - voltage graphs - Electric circuits - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">Pearson Edexcel (9-1)   SHORTS   Investigating resistance in circuits   GCSE Comb Sci   GCSE Physics (youtube.com)</a>
w/c 29 <sup>th</sup> Jan	Quiz 3 -Using Charge equation.	<a href="#">Electrical charge and current - Electric circuits - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Physics - Charge, Current &amp; Time #16 (youtube.com)</a>
w/c 5 <sup>th</sup> Feb	Quiz 4– Magnetism	<a href="#">Types of magnets - Magnets and magnetic fields - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>  <a href="#">The motor effect - Electromagnets - Higher - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">GCSE Physics - Motor Effect #79 (youtube.com)</a>  <a href="#">GCSE Physics - What Are Magnets? How to Draw Magnetic Field Lines #76 (youtube.com)</a>
w/c 12 <sup>th</sup> Feb	Quiz 5 – Changes of state, Kelvin Scale, and Particle theory	<a href="#">States of matter - Temperature changes and energy - Edexcel - GCSE</a>	<a href="#">Kelvin Scale and Absolute Zero   9-1 GCSE Physics   OCR,</a>

		<a href="#">Combined Science Revision - Edexcel - BBC Bitesize</a>	<a href="#">AQA, Edexcel (youtube.com)</a>
<b>w/c 19<sup>th</sup> Feb</b>	<p>Quiz 6 – Core practical – Investigating Springs</p> <p>Core practical – Investigating densities</p>	<p><a href="#">Required practical - how to calculate density - Density of materials - Edexcel - GCSE Physics (Single Science) Revision - Edexcel - BBC Bitesize</a></p> <p><a href="#">Investigating force and extension with a spring - Forces and elasticity - Edexcel - GCSE Combined Science Revision - Edexcel - BBC Bitesize</a></p>	<p><a href="#">Pearson Edexcel (9-1) Combined Science &amp; GCSE Physics Investigating the density of solids &amp; liquids (youtube.com)</a></p> <p><a href="#">Pearson Edexcel (9-1)   SHORTS   Extension of a spring   GCSE Combined Science   GCSE Physics (youtube.com)</a></p>