

Curriculum Overview – Phase 2 Biology

Unit Title	Learning	How can parents best support?
<p>Cell Biology September</p>	<p>Students will build on KS3 knowledge about cells. They learn about Prokaryotic and Eukaryotic cells, specialised cells, stem cells and their importance in today's world. In terms of skills, students will become competent in preparing and observing slides using a microscope.</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8.</p> <p>Use the following website to consolidate learning and revise for assessments https://www.bbc.com/bitesize/topics/z2mttv4</p> <p>Watch this video clip of how to use a microscope https://www.youtube.com/watch?v=jBVxo5T-ZQM</p>
<p>Human Biology September to November</p>	<p>Students will learn about the digestive system, circulatory system and composition of blood, and the effect of lifestyle on non-communicable diseases. There are several practicals which students will carry out in lessons. Students will test samples of food for particular nutrients and investigate the role of enzymes in digestion by carrying out a full investigation using our acronym "AIDCARS".</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8.</p> <p>Operation Ouch has some excellent clips to promote engagement and understanding.</p> <p>Use the following website to consolidate learning and revise for assessments https://www.bbc.com/bitesize/topics/zwi22nb</p> <p>Watch these video clips of required practicals: https://www.youtube.com/watch?v=zbZxFxXN6m4 https://www.youtube.com/watch?v=JyXXoEvEWc8</p>

<p>Immunology November to December</p>	<p>Students will learn about communicable diseases caused by pathogens (Bacteria, Viruses, Fungi and Protists)</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8. Use the following website to consolidate learning and revise for assessments https://www.bbc.co.uk/bitesize/guides/zcqs2nb/revision/3 When attending appointments with health care professionals, encourage your child to ask questions to extend their knowledge.</p> <p>Read newspaper articles about Health and Well being or new developments in the medical industry.</p>
<p>Biochemistry January to February</p>	<p>Students will learn about 2 key processes, Photosynthesis and Aerobic Respiration. They will investigate factors that affect these 2 processes and have plenty of opportunity to develop their investigative skills</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8. Use the following links to consolidate learning and revise for assessments https://www.bbc.co.uk/bitesize/guides/zpwmxnb/revision/1 https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/1 https://www.bbc.co.uk/bitesize/guides/zm6rd2p/revision/1</p>

<p>Neurology & Endocrinology February to March</p>	<p>Students will learn about how the body regulates internal conditions. This includes looking at the nervous system and endocrine system.</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8. Use the following website to consolidate learning and revise for assessments https://www.bbc.com/bitesize/topics/zyybb82</p>
<p>Genetics March to May</p>	<p>Students will learn about DNA and genetic inheritance. They will continue to learn some complex terminology relating to genetics. Students will learn how to make predications depending on if genes are dominant or recessive and predict the features that offspring may inherit. Student will also learn about how living things are classified.</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8. Use the following website to consolidate learning and revise for assessments https://www.bbc.co.uk/bitesize/guides/zp7thyc/revision/1 https://www.bbc.com/bitesize/topics/zppffcw</p>

<p>Environmental Science May to July</p>	<p>Students will learn how plants and animals are adapted to survive and how things support one and other in a habitat. During this term revision for end of year exams will begin. Students will revise some key topics in lessons and complete a formal exam. Personalised feedback will be provided to help students identify specific areas of revision.</p>	<p>Read the knowledge organiser together with a particular focus on the keywords and definitions. Students should be able to link their learning back to previous topics studied in year 7 or 8. Use the following websites to consolidate learning and prepare for assessments https://www.bbc.co.uk/bitesize/topics/zxhhvcw https://www.bbc.com/bitesize/topics/zxxhh39 https://www.bbc.co.uk/bitesize/topics/zyybb82 https://www.bbc.co.uk/bitesize/topics/zppfcw</p>
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