

Calendar	Topic	Assessment	Sequencing and Coherence <i>concepts - themes - skills</i>	Literacy <i>reading - vocabulary - oracy - writing</i>
Autumn Half Term 1	<p>B5 Communicable Disease: Health and disease, pathogens and disease, preventing infections, viral diseases, bacterial diseases, diseases caused by fungi and protists, human defence responses.</p> <p>B6 Preventing and Treating Disease: Vaccination, antibiotics and painkillers, discovering drugs and drug development.</p>	<p>B5/6 Online quiz set on Educake – instantly marked and direct question feedback through Educake.</p>	<p>This follows on from a “Diet and Health” unit in year 8, and to some degree work done in year 9 GCSE on using stem cells to treat diseases, heart problems, using statins to treat cholesterol, digestion.</p> <p>Pupils cover work on drugs, especially alcohol in year 8, along with some work on blood cell types in year 7. There is a link here without covering the same material. Pupils need to be able to sequence events e.g. with how vaccines work. This is a skill at KS3 e.g. in work on Genes and Evolution.</p>	<p>Pupils have a list of key vocabulary in the learning journey which is issued at the start of every unit.</p> <p>There are literacy tasks available for every unit.</p> <p>Crosswords are available at KS3 for the different units, using many of the key words from that unit these and other key words are then introduced/reintroduced at KS4.</p> <p>Extended writing – The Immune system</p>
Autumn Half Term 2	<p>B7 Non-Communicable Disease: Non-communicable disease, cancer, smoking, diet, exercise and disease, alcohol and other carcinogens.</p>	<p>B5/6/7 End of topic test GCSE style questions FT and HT, working scientifically and synoptic content from B1-B6.</p> <p>Teacher marked, feedback through model answer mark scheme and follow up exam style questions on areas of weakness – personalised.</p>	<p>Pupils cover work on drugs, especially alcohol in year 8. Year 10 material is in more depth, and although they have used terms like carcinogen before, they now spend more lesson time on these topics which are split up further, for example cancer isn’t covered as a whole lesson at KS3</p>	<p>Explaining why diseases are categorised as communicable and non-communicable</p> <p>Practice saying key terms out loud</p> <p>Extended writing – How lifestyle increases the chance of developing CHD</p>

<p>Spring</p> <p>Half Term</p> <p>3</p>	<p>B8 Photosynthesis: Photosynthesis and rate of, how plants use glucose, optimising photosynthesis.</p>		<p>In year 8 pupils study a unit called Photosynthesis and Respiration, where they will have done practical work like testing a leaf for starch. At KS4 this is extended to testing a variegated stencilled leaf for starch, and a required practical on the effect of temperature on photosynthesis. Detail at this stage has more focus on aspects like the balanced symbol equation, greenhouse economics, limiting factors (these points discussed previously now having a specific label)</p>	<p>Debating ideal factors in ultimate greenhouse</p> <p>Extended Writing – Photosynthesis</p> <p>Required practical</p>
<p>Spring</p> <p>Half Term</p> <p>4</p>	<p>B9 Respiration: Aerobic respiration, response to exercise, anaerobic respiration, metabolism and the liver.</p>	<p>B8/9 Online quiz set on Educake – instantly marked and direct question feedback through Educake.</p> <p>B8/9 End of topic test GCSE style questions FT and HT, working scientifically and synoptic content from B1-B8.</p> <p>Teacher marked, feedback through model answer mark scheme and follow up exam style questions on areas of weakness – personalised.</p>	<p>Both aerobic and anaerobic respiration are covered at KS3, but with less emphasis on variations of anaerobic respiration, and less analysis of practical results (e.g. in exam questions)</p>	<p>Extended Writing – Heart Rate Investigation</p>

Summer Half Term 5	B10 The Human Nervous System: Homeostasis, structure and function of the nervous system, reflex actions.	B10 Online quiz set on Educake – instantly marked and direct question feedback through Educake.	Nerve cells are looked at in Year 7 B1 Living Systems, as are body systems including the nervous system. The nervous pathway at this point is only very briefly outlined.	Verbalising 7 stages of reflex arcs Extended Writing – Ruler drop required practical
Summer Half Term 6	B11 Hormonal Control in Humans and Plants: Hormonal control, control of blood glucose, treating diabetes, role of negative feedback, human reproduction, hormones and the menstrual cycle, control of fertility, infertility treatments.	B10/11 End of topic test GCSE style questions FT and HT, working scientifically and synoptic content from B1-B10. Teacher marked, feedback through model answer mark scheme and follow up exam style questions on areas of weakness – personalised.	In year 9 pupil's hormones are introduced (part of B4 – what is found in blood?), hormones of the pancreas are looked at very briefly when the job of the pancreas is discussed at KS3 (Diet and Health – digestion). Pupils are taught about the menstrual cycle in the Year 7 Reproduction unit but not about the effects of each hormone. Fertility issues do crop up in Year 7 in extended topics like 'Granny Mummies' and IVF which there is a KS3 assessed question on.	IVF debate Extended Writing – Evaluate methods of contraception