

Year 8, B3 Diseases and Staying Healthy, Science

Rationale and Context of Unit:	Core curriculum content:	Tier 2 & Tier 3 vocabulary explicitly taught:
<ul style="list-style-type: none"> <i>This unit is the second biology unit of the Year 8 as it builds on the topics have learnt in Year 7 Cells and is seen again at of GCSE.</i> <i>There are some tricky concepts than the other year 8 topic as this topic build on both this and the year 7 knowledge which is why it is taught last Year 8.</i> <i>This unit links to the GCSE B5 – Communicable diseases, B7 – Non-communicable diseases, and B9 Respiration units.</i> 	<ul style="list-style-type: none"> Infectious diseases and pathogens Preventing pathogen transfer Immunity and the immune system Diffusion Absorption and the digestive system Aerobic respiration Anaerobic respiration The breathing system, including the lungs Asthma Exercise The dangers of smoking The dangers of drug misuse 	<ul style="list-style-type: none"> <i>Haemoglobin</i> <i>Red blood cell</i> <i>Anaerobic respiration</i> <i>Aerobic respiration</i> <i>Respiration</i> <i>White blood cell</i> <i>Prevent</i> <i>pathogen</i>
Challenge and Support:	World wide learning/ links to 21 st century:	Cultural capital/ Industry/ Enrichment:
<p><i>Each lesson plan has a specific section of how to differentiate the lesson to the needs of every students. This include specific resources to support and challenged students depending on their needs. Example includes “challenge - pupils could complete more than two additional interesting diseases in their table. They could add any additional diseases that they know.”</i></p>	<ul style="list-style-type: none"> Vaping (L15) 	<ul style="list-style-type: none"> Medical Virologist Cleaning chemicals Fitness
Historical, Social, Moral, Spiritual, Cultural context:	Cross curricular links/ literacy/numeracy:	Common misconceptions:
<ul style="list-style-type: none"> How smoking has evolved and its advertising (L15) 	<ul style="list-style-type: none"> <i>Cross-curricula links: PE – How the respiration and circulatory systems supply our body with</i> 	<ul style="list-style-type: none"> <i>Fat is essential for our bodies</i> <i>All food groups are essential for us</i>

<ul style="list-style-type: none"> • Modern social smoking (L15) • Damage of second hand smoke (L15) 	<p><i>energy to perform sport and how these change during exercise.</i></p> <ul style="list-style-type: none"> • <i>Numeracy: graph analysis</i> • <i>Literacy: additional expansion of vocabulary – use the detailed cards to go through unknown words such as ‘morbidity’, ‘mortality’ ‘asymptomatic’ ‘zoonotic’.</i> 	<ul style="list-style-type: none"> • <i>Blood is always red</i> • <i>We breath due to a pressure difference between our chest cavity and the outside pressure</i> • <i>Vaccines increase your bodies chances of fighting off illness</i> • <i>Exercise had a huge number of benefits</i> • <i>Smoking is highly addictive</i> • <i>Vaping is addictive</i>
Assessment timeline:		
<ul style="list-style-type: none"> • <i>Practical skills monitored by teacher when conducting experiments.</i> • <i>End of topic exam to assess pupil progress at the end of the unit.</i> • <i>All lessons have success criteria presented to pupils at the start of the lesson.</i> • <i>Common misconception task in this unit will have feedback to help improve pupils understanding after they have completed the assessment.</i> 		
Home learning		
<ul style="list-style-type: none"> • <i>Seneca online learning or Year 8 homework booklet – 2 pages.</i> • <i>Scholarly reading https://link.springer.com/article/10.1186/s12889-020-09319-8</i> 		
Feedback		
<ul style="list-style-type: none"> • <i>Students will have feedback on their common misconception task midway through this unit.</i> • <i>Students will self-assess their home learning page of the homework booklet (if done).</i> • <i>Students will have feedback on their end of topic text which will be teacher assessed also</i> <i>Students will generate self-feedback on their work in each lesson (where appropriate).</i> 		

Length of unit (duration indicated in lessons)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
						Unit:B4 Breathing											