

| Curriculum Map | | Subject | Biology | Year | 10 | |
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| Unit | Summary | Skills | Assessment | British Values and SMSC | Career links | Cross-curricular links |
| B1- cells | Microscopy, structure and function of Eukaryotic and Prokaryotic cells, specialised cell examples, movement of substances via diffusion, osmosis and active transport. | Microscope skills (RP and Calculations) Observations (RP) Practical investigation (RP Osmosis) | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Fascination with understanding the world around them. Scientific community | Microbiology | Numeracy- algebra and unit conversions |
| B2- cell division | Mitosis, Stem cell uses and ethics. | Evaluation of arguments (stem cell ethics) | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Stem cell ethics discussion Scientific community Understanding the viewpoints of others | Stem cell research and donation (links to Antony Nolan trust included on resource) | PSHRE/RE- Stem cell ethics Link back to B1 |
| B3- organisation & digestion | Structure and function of the digestive system. Food tests RP, conditions for enzyme activity. | RP skills- Food tests. Graph skills- enzymes | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Understanding consequences and how actions impact on others & the viewpoints of others | | Food technology- macronutrient structure. Links back to B1 |
| B4- Animal Tissue/Plant tissue | Structure of the leaf, transport and transpiration in plants. Blood vessels, structure and function of the heart, heart disease and the structure and function of the lungs | Dissection/observation skills. Graph skills- plants Microscope skills- structure of the leaf. Analysing data- heart disease. | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Fascination with the world around them and their own bodies. Understanding consequences and how actions impact on others. | Medicine, Sports Science | PE (heart, lung and blood vessels). Food tech- heart disease and cholesterol. |
| B5- Disease | Communicable disease, immune system, disease examples. (<i>triple-plant disease and defence, culturing microbes</i>) | Analysing data. Triple- preparing a sterilised culture. | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Discussions- willingness to reflect on experiences. Scientific community. | Microbiology (triple) | |
| B6- Preventing disease | Vaccinations, antibiotics and painkillers, drug development. (<i>triple- monoclonal antibodies</i>) | Analysing data Evaluating arguments (vaccinations) | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Vaccination- reflective about own beliefs & tolerant of others. Antibiotics- consequences of actions | Medicine Medical journalist | RE ethics- vaccination debate |
| B7- Non-communicable disease (Health data) | Non-communicable disease, cancer, lifestyle data. | Analysing data. Sensitive topic communication skills in discussions | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Discussions- willingness to reflect on experiences. Sensitive to experiences of others | Medicine. Cancer research, medical journalist | PE- lifestyle data |
| B8- Photosynthesis | Photosynthesis, rate of photosynthesis | Analysing data from RP. Graph skills | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Fascination with understanding the world around them. Scientific community | Plant scientist Horticulturalist | Links back to B4 |
| B9- Respiration | Respiration, the effects of exercise, metabolism | Analysing data. Collecting data (pulse) | Do now task 30min End of Unit test (Kerboodle). Optional homework booklet | Understanding consequences and how actions impact on others. | Sports Science, medicine | PE- all topics. Links back to B1, B3 and B4 |

