

**Curriculum Map** 

Subject

Biology

Year

10

Unit	Summary	Skills	Assessment	British Values and SMSC	Career links	Cross-curricular links
B1- cells Taught Term 3 Yr9	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)	End of Topic Assessment HW – Seneca HW – Exam Booklets	Fascination with understanding the world around them. Scientific community	Microbiology	Numeracy- algebra and unit conversions
B2- cell division Taught Term 3 Yr9	Mitosis, Stem cell uses and ethics.	Evaluation of arguments (stem cell ethics)	End of Topic Assessment HW – Seneca HW – Exam Booklets	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 Interpreting data, recognising variables constructing methods	End of Topic Assessment HW – Seneca HW – Exam Booklets	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.	End of Topic Assessment HW – Seneca HW – Exam Booklets	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. (triple-plant disease and defence, culturing microbes)	Analysing data. Triple- preparing a sterilised culture.	End of Topic Assessment HW – Seneca HW – Exam Booklets	Discussions- willingness to reflect on experiences. Scientific community.	Microbiology (triple)	
B6- Preventing disease	Vaccinations, antibiotics and painkillers, drug development. (triple-monoclonal antibodies)	Analysing data Evaluating arguments (vaccinations)	End of Topic Assessment HW – Seneca HW – Exam Booklets	Vaccination- reflective about own beliefs & tolerant of others. Antibiotics- consequences of actions	Medicine Medical journalist	RE ethics- vaccination debate
B7- Noncommunicable disease (Health data)	Non-communicable disease, cancer, lifestyle data.	Analysing data. Sensitive topic communication skills in discussions	End of Topic Assessment HW – Seneca HW – Exam Booklets	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	End of Topic Assessment HW – Seneca HW – Exam Booklets	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)	End of Topic Assessment HW – Seneca HW – Exam Booklets	Understanding consequences and how actions impact on others.	Sports Science, medicine	PE- all topics. Links back to B1, B3 and B4