

MAGHULL HIGH SCHOOL – CURRICULUM MAP

Unit: Responding to Change LESSONS	<ol style="list-style-type: none"> 1. Survival and response 2. Receptors 3. Control of heart rate 4. Nerve impulses 5. Synaptic transmission 	<ol style="list-style-type: none"> 6. Skeletal muscles are stimulated to contract by nerves and act as effectors 7. Principles of homeostasis and negative feedback 	<ol style="list-style-type: none"> 8. Control of blood glucose concentration 9. Control of blood water potential
	<ul style="list-style-type: none"> • Define taxis and kinesis • Describe the protective effect • Identify the basic structures of Pacinian corpuscle • Recall the roles of SAN and AVN in the bundle of his • Recall the role and locations of chemoreceptors and pressure receptors • The factors that influence blood glucose concentration. • The role of the liver in glycogenesis, glycogenolysis and gluconeogenesis. • The roles of the hypothalamus, posterior pituitary and antidiuretic hormone (ADH) in osmoregulation. 	<ul style="list-style-type: none"> • Identify the structure of myelinated motor neuron • Describe the factors affecting the speed of conductance: myelination, salutatory conduction, axon, diameter, temperature • Label the detailed structure of a synapse and neuromuscular junction • Describe the roles of actin, myosin, calcium ions, and ATP in myofibril contractions • Interpret information relating to examples of negative and positive feedback • use information provided to predict and explain the effects of specific drugs on a synapse. 	
Assessment / Feedback Opportunities	Formative Assessment Teacher questioning Quizzes Exam style questions Essays	Summative assessment Topic assessment Exam questions in future end of topic assessments to assess recall	
Key Vocabulary	Independent Variable, Dependent Variable, Control Variables, Method, Conclusion, Precaution, Evaluation, Reliable, Precision, Valid, Anomaly, Describe, Explain, Compare, Analyse, Calculate, Suggest, Absolute, Uncertainty, Error Taxis, Kinesis, Tropism, neurone, stimulus, receptor, coordinator, effector, response, autonomic, sympathetic, parasympathetic, photoreceptors, retina, depolarised, hyperpolarised, Dendrons, synapse, summations, myogenic, cardiac, actin, myosin		
Literacy/Reading Opportunities	Subject specific vocabulary introduced before reading of related texts Word etymology from Latin and Greek roots Reading of simple and complex sentences, paragraphs, articles Scientific writing including structuring methods, comparisons and evaluations Synoptic essay writing		

Cross Curricular Themes	Numeracy/Maths – averages (means), reading scales, graph plotting, lines of best fit, using and rearranging equations, using scientific calculators, significant figures
Personal Development (Including British Values, RSE, Citizenship)	None
Career Opportunities	Doctors, nurses, wildlife conservationist