

Scheme of Learning – Long Term Planning

Subject: Biology		Key stage: 4	
Year	Autumn Term*	Spring Term*	Summer Term*
9	<u>Autumn 1</u> Topic 1 Cell Biology <ul style="list-style-type: none"> cell structure microscopy 	<u>Spring 1</u> Topic 3 Infection & Response <ul style="list-style-type: none"> viral, bacterial, fungal and protist diseases human defence systems vaccinations 	<u>Summer 1</u>
	<u>Autumn 2</u> <ul style="list-style-type: none"> transport in and out of cells 	<u>Spring 2</u> <ul style="list-style-type: none"> antibiotics and painkillers discovery & development of disease 	<u>Summer 2</u> End of year exam on topics 1 & 3
10	<u>Autumn 1</u> Topic 2 Organisation: <ul style="list-style-type: none"> how animal tissues, organs and organ systems are organised how the digestive system works how the circulatory system works 	<u>Spring 1</u> Topic 4 Bioenergetics: <ul style="list-style-type: none"> photosynthesis respiration metabolism 	<u>Summer 1</u> <ul style="list-style-type: none"> biodiversity human interactions on ecosystems revision of topics 1-4
	<u>Autumn 2</u> <ul style="list-style-type: none"> non-infectious diseases, such as coronary heart disease, cancer and how lifestyle can effect these how plant tissues, organs and organ systems are organised transpiration and translocation 	<u>Spring 2</u> Topic 7 Ecology: <ul style="list-style-type: none"> adaptions, interdependence and competition within ecosystems sampling techniques cycling of carbon and water food production 	<u>Summer 2</u> End of year exam on topics 1 – 4 <ul style="list-style-type: none"> individual target setting start topic 5
11	<u>Autumn 1</u> Topic 5 Homeostasis & Response: <ul style="list-style-type: none"> the human nervous system human endocrine system negative feedback plant hormones 	<u>Spring 1</u> Topic 6 Variation, Inheritance & Evolution: <ul style="list-style-type: none"> sexual and asexual reproduction cell division & stem cells DNA and the genome inheritance 	<u>Summer 1</u> Revision and exams
	<u>Autumn 2</u> <ul style="list-style-type: none"> Hormones in human reproduction Contraception The use of hormones to treat fertility 	<u>Spring 2</u> <ul style="list-style-type: none"> variation & evolution selective breeding genetic engineering classification 	<u>Summer 2</u>

Each Topic will be assessed with an end-of-topic test