

Curriculum Assessment Map: Year 10 Biology



	Autumn Term	Spring Term	Summer Term
Topic	<p>Bioenergetics Infection and response</p>	<p>Homeostasis and response</p>	<p>Ecology</p>
Key Learning & Skills	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to explain photosynthesis and how to calculate the rate of photosynthesis. Pupils to explain the uses of the products of photosynthesis Pupils to explain the difference between aerobic and anaerobic respiration Pupils to explain the role of metabolism Pupils will be able to explain what a communicable disease is including information on viral, bacterial, fungal and protists diseases Pupils will be able to explain the role of vaccinations and drugs on the body Pupils will be able to explain the discovery and development of drugs Triple only: Pupils to know role of monoclonal antibodies and plant defences <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Calculating rate and analysing graphs Practical skills: To investigate the effect of light intensity on rate of photosynthesis 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to what homeostasis is and how this can be regulated Pupils to describe structure and role of nervous system and how reaction time can be affected Pupils to describe the role of the endocrine system in response to controlling blood glucose levels Pupils to know the role of hormones in reproduction and contraception and applying this learning to infertility Triple only: Pupils to know the structure of the eye and the brain. Pupils to know how thermoregulation occurs. Pupils can describe how water and nitrogen levels are maintained. Pupils can describe the roles of hormones in plants <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Calculating reaction time Practical skills: To investigate the effect of different factors on rate of reaction 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to define keywords relating to ecology including ecosystem, habitat and biodiversity Pupils to be able to sample an area to check for spread of organisms Pupils to describe how competition and adaptations affect the ecosystem Pupils to discuss how the feeding relationships in an ecosystem Pupils to explain how material are cycled in the ecosystem Pupils to be able to describe how biodiversity is maintained Pupils to describe the effects of global warming and the factors that are causing this including deforestation and pollution Triple only: Pupils to know how decomposition can be controlled. Pupils to explain what food security is and its importance <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Analysing graphs and data Practical skills: To investigate the spread of species using sampling techniques
End points	Please see module specific endpoints throughout books	Please see module specific endpoints throughout books	Please see module specific endpoints in books
Informal (formative) Assessment	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet
Formal (summative) Assessment	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised 	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised 	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised

Curriculum encompassing literacy, careers and enrichment as well as interconnectivity with other subjects

Curriculum Assessment Map: Year 11 Biology



	Autumn Term	Spring Term	Summer Term
Topic	Exchange and Transport	Animal coordination and control	Paper 1 and Paper 2 Biology revision
Key Learning & Skills	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to explain how substances are transported around the body Pupils to explain why organisms need an exchange surface Pupils to know how structures in the body are adapted for gas exchange Pupils to know the structure and function of the blood cells and blood vessels Pupils to be able to label the heart and explain how blood flows through the structure Pupils to compare aerobic and anaerobic respiration Pupils to explain how exercise affects the body Triple only: Pupils can describe the factors that affect diffusion and calculate ficks law <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Calculating surface area to volume ratio, cardiac output and analysing graphs Practical skills: To investigate the rate of respiration in living organisms 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to describe the role of various hormones o the body Pupils to be able to describe the affects of adrenaline and thyroxine on the body Pupils to explain the stages of the menstrual cycle and how this is controlled by hormones Pupils to explain how hormones can be used for contraception and infertility Pupils to explain how blood glucose levels can be regulated Pupils to describe the cause of treatment for type 1 and type 2 diabetes Triple only: Pupils can describe how thermoregulation and osmoregulation is achieved. Pupils can label and explain the role of the urinary system. Pupils can describe how kidney failure can be treated <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Calculating hip to waist ratio and BMI. Analysing graphs Practical skills: To investigate BMI and Waist to hip ratios 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils will be recapping content covered in their GCSE exam QLA's will inform what topics to revise in class and for intervention Knowledge will be applied to exam questions <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Pupils to recap common maths skills covered in the specification Practical skills: Pupils to recap all Biology core practicals
End points	Please see module specific endpoints throughout books	Please see module specific endpoints throughout books	Please see module specific endpoints in books
Informal (formative) Assessment	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet
Formal (summative) Assessment	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised 	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised 	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised

Curriculum encompassing literacy, careers and enrichment as well as interconnectivity with other subjects