

Subject: KS4 Biology		Year Group: 11
Term 1 Key Focus/Topic(s) Animal coordination control and homeostasis <ul style="list-style-type: none"> ● Hormones ● Metabolic rate ● Menstrual cycle ● Blood glucose and diabetes ● Thermoregulation ● Osmoregulation and the kidneys 	Term 2 Key Focus/Topic(s) Exchange and transport in animals <ul style="list-style-type: none"> ● Transport and exchange ● Factors effecting diffusion ● Circulation and the heart ● Cellular respiration ● Core practical – respiration ● Ecosystems ● Energy transfer ● Abiotic factors ● Core practical – quadrats 	Term 3 Key Focus/Topic(s) Ecosystems <ul style="list-style-type: none"> ● Biotic factors ● Parasitism and mutualism ● Biodiversity and humans ● Food security ● Water cycle ● Carbon cycle ● Nitrogen cycle ● Rates of decomposition
Term 1 Assessment Opportunities: <ul style="list-style-type: none"> ● Classwork with a particular focus on extended open response questions (exam preparation). 	Term 2 Assessment Opportunities: <ul style="list-style-type: none"> ● Classwork with a particular focus on extended open response questions (exam preparation). ● Respiration rates (core practical investigation). 	Term 3 Assessment Opportunities: <ul style="list-style-type: none"> ● Classwork with a particular focus on extended open response questions (exam preparation).
Term 4 Key Focus/Topic(s) Revision <ul style="list-style-type: none"> ● Knowledge. ● Numeracy skills. ● Literacy skills. ● Core practicals. 	Term 5 Key Focus/Topic(s) Revision <ul style="list-style-type: none"> ● Knowledge. ● Numeracy skills. ● Literacy skills. ● Core practicals. 	
Term 4 Assessment Opportunities:	Term 5 Assessment Opportunities:	

<ul style="list-style-type: none"> ● Mock examinations ● Past paper questions 	<ul style="list-style-type: none"> ● Past paper questions 	
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Rationale:

All of the topics covered in Year 11 (like the Year 10 material) require higher levels of abstract thinking from students. More so than in Year 10, some of the material requires students to expand on knowledge gained from the key concepts and apply this to more abstract thinking. For example exchange and transport in animals requires students to consider diffusion and cellular transport with reference to whole body systems.

In Year 11 Biology we place a particular focus on:

- Literacy skills – In preparation for 6 mark exam style questions, students are required to respond to various styles of questions – explain, describe, plan/devise, comment on, compare and contrast.
- Mathematical skills in Biology – selecting and purposefully using data to support scientific conclusions, explanations and arguments.
- Practical Skills – Understanding the scientific method, processing and presenting data, forming conclusions and making improvements.

Evaluation:

- Assessment opportunities will involve teacher, self and peer assessment. The assessment will focus around work produced in lessons where the students are required to demonstrate their literacy and/or numeracy skills as well as their scientific knowledge.
- Students should demonstrate good mathematical skills in Biology – interpretation of data.
- Assessment of students extended writing answers – students should demonstrate that they can identify command words; context or/and instructions; key terminology in the questions. In response to unpicking the questions students should be able to make responses that are detailed, explaining the science and use the correct scientific terminology.
- Book scrutiny, lesson observations and collegial discussions will be used to quality assure teaching and learning. Gap analysis on mock papers.