

<h1>Year 11</h1> <h2>Biology</h2>			
1	<ul style="list-style-type: none"> SB5, Describe how some diseases can be identified, spread, and prevented, describe the role of modern medicine in health care 	<ul style="list-style-type: none"> SB5, Explain how some diseases can be identified, spread, and prevented, explain the role of antibiotics & describe the role of immune system 	<ul style="list-style-type: none"> SB5, Explain how some non-communicable & communicable diseases can be identified, treated and prevented, explain the role of antibiotics, vaccines & the role of immune system
2	<ul style="list-style-type: none"> SB6, Explain how light intensity affects the rate of photosynthesis; describes the role of the xylem and stomata in transporting water through a plant; describe some adaptations of plants to extreme environments 	<ul style="list-style-type: none"> SB6, Explain how light intensity and carbon dioxide concentration affects the rate of photosynthesis; describes the plant structures used to transport sucrose, water and mineral ions; explain how plants are adapted to extreme environments; explain the role of auxins in tropisms 	<ul style="list-style-type: none"> SB6, Explain the structures & roles of specialised cells used in photosynthesis and transport, explain mathematically how the processes of photosynthesis, transpiration and translocation are affected by various factors; explain plant adaptations to extreme environments; explain the use of specific plant hormones in tropisms and commercial uses like weedkillers and fruit ripening
3	<ul style="list-style-type: none"> SB7, Describe the role of hormones in the human body, including diabetes, and how some of these influence the menstrual cycle; describe the structure of the urinary system 	<ul style="list-style-type: none"> SB7, Explain the role of hormones and nervous system on homeostasis, including diabetes, and the control of the menstrual cycle; describe the structure and function of the urinary system including filtration and ADH 	<ul style="list-style-type: none"> SB7, Explain the interactions of hormones and the nervous system on homeostasis, including diabetes, and the control of the menstrual cycle, including contraception and Assisted Reproductive Technology; explain the function of the urinary system and how ADH affects the formation of urine
4	<ul style="list-style-type: none"> SB8, Describes the role of alveoli in gas exchange and the heart and in transport of substances; know some factors which influence diffusion 	<ul style="list-style-type: none"> SB8, Explain how alveoli, blood vessels and the heart are adapted for their function; be able to use $\text{Cardiac output} = \text{stroke volume} \times \text{heart rate}$; describe the interaction of factors influencing rate of diffusion 	<ul style="list-style-type: none"> SB8, Explain in detail how alveoli, blood vessels and the heart are adapted to their function; be able to apply knowledge of respiration to changes in heart rate and breathing rate during exercise; Use Fick's Law to calculate rate of diffusion
5	<ul style="list-style-type: none"> SB9, Be able to list a range of biotic and abiotic factors which influence the size of a community; describe how to sample an area using quadrats and transects; know how humans can positively and negatively influence the environment, and describe how indicator species can show this; know how carbon and water cycle through the environment 	<ul style="list-style-type: none"> SB9, Explains why a range of biotic and abiotic factors influences the size of a community; explains how to sample an area using a range of techniques; explain how humans can positively and negatively influence the environment, explaining the use of indicator species; explain how carbon, water and nitrogen cycle through the environment; 	<ul style="list-style-type: none"> SB9, Explains why a range of biotic and abiotic factors, including interdependence, influences the size of a community; explains how to use sampling to estimate the number of organisms in a habitat; explain how humans can positively and negatively impact local and global biodiversity, including explaining the use of specific named indicator species; explain the interactions which influence the water, carbon and nitrogen cycles.