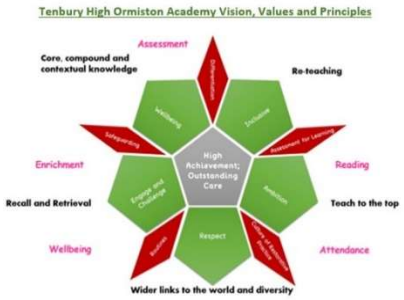
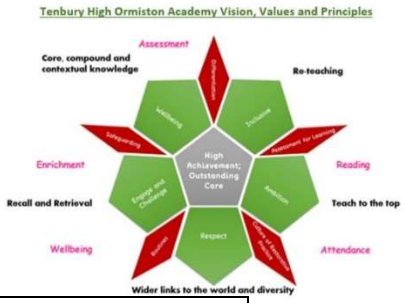
TENBURY HIGH
ORMISTON ACADEMY



Curriculum Overview for Biology
Year 10

Half Term 1: Cells and Organisation **Substantive Knowledge:** Cell transport methods; diffusion, osmosis and active transport Surface area and volume ratio Structure and function of xylem, phloem and root hair cells Transpiration stream as a transport system Hierarchical system: cells, tissues and organs Organ systems: Practical – food tests **Disciplinary Knowledge:** Investigating osmosis Sequencing methods, identifying variables, completing risk assessments Calculating magnification, SA:vol		Skim and Scan of source information Decoding terms Etymology of key terms
		Xylem, phloem, transpiration, root, pathogen, virus, bacteria,
		Recall questions to start every lesson Recall test Review sheets
		Revision Card preparation Recall test Repetition of use of revision cards for review sheets and recall tests and for termly exams.
Half Term 2: Organisation **Substantive Knowledge:** Organ systems: Digestive enzymes Enzyme mechanism and activity Practical into enzyme activity The heart structure and function The lungs structure and function Composition of blood Lifestyle factors and their links to disease Coronary heart disease and its treatment Cancer and its risk factors Plant systems: Leaf structure and function Stomata structure and function Root structure and function Xylem structure and function Phloem structure and function Transpiration stream Rates of transpiration and how they are impacted **Disciplinary Knowledge:**		Skim and Scan of source information Decoding terms Etymology of key terms
		Fungi, protist, symptom, phagocyte, lymphocyte, body defence, clinical trial, antibody, antigen
		Recall questions to start every lesson Recall test Review sheet
		Revision Card preparation Recall test Repetition of use of revision cards for review sheets and recall tests and for termly exams.



Analysis of data Importance of prevention and cure Developing scientific arguments Drug discovery and development – Plants and microorganisms, pharma industry synthesis, trials and testing. The importance of testing Analysis of graphical data – antibody levels Process of identifying plant disease		