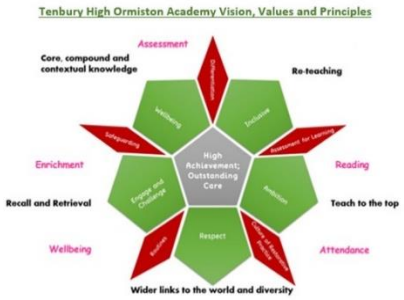
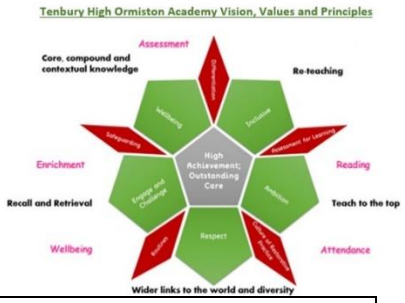
TENBURY HIGH
ORMISTON ACADEMY



Curriculum Overview for Science
Year 8

Half Term 1: Can we live on mars **Substantive Knowledge:** ❑ Content of a healthy human balanced diet. ❑ Consequences of unbalanced diet. ❑ Photosynthesis. ❑ Pure substances (potable water). ❑ Describe and explain simple techniques of separation. ❑ Earth and atmosphere (structure and composition). ❑ Earth's resources. ❑ Motion and forces (graphs). ❑ Newton. ❑ Balanced and unbalanced forces. ❑ Earths tilt, gravity etc. **Disciplinary Knowledge:** ❑ Safe use of practical equipment. ❑ Use appropriate techniques, apparatus and materials during lab work/practical. ❑ Ask questions and develop a line of enquiry based on observations of the real world. ❑ Make and record observations. ❑ Carry out food tests. ❑ Use separation techniques.		Article homework – reading for meaning, Model reading and highlighting to pick out key details, reading of data, Skim reading
		Forces, Balanced, Unbalanced, Gravity, Solar system, Planets, Earth, Mars, Evolution, Atmosphere, Food, Water, Warmth, Shelter, Diet, Respiration, Photosynthesis, Potable, Fertiliser, Population, Colony
		Recall quiz x 2 Assessment focussed on describing and comparing body systems
		Reading task Recall quiz x2
Half Term 1: The Science of Us **Substantive Knowledge:** Hierarchy of organisation (cells, tissues, organs, organ systems) Adaptions to specialised cells. Arrangement of the periodic table and brief history Basic structure of atoms (size, nucleus, electrons, protons, neutrons). Structure and function of the respiratory, circulatory, skeleton, digestive and muscular systems. How the muscular system utilises moments. Describe the physical and hormonal stages of puberty and difference between puberty and adolescence, including the role of hormones Describe the process of fertilisation. Pregnancy and birth Explain how drugs, alcohol, smoking and healthy/unhealthy living choices impact pregnancy. **Disciplinary Knowledge:** Use a variety of resources to summarise notes Ask questions and develop a line of enquiry based on observations of the real world. Make and record observations		Article homework – reading for meaning, Model reading and highlighting to pick out key details, reading of data, Skim reading
		Cell, tissue, organ, organ system, Specialised, differentiation Specialised, differentiation, Group, period, metal, non-metal Proton, electron, neutron, Breathing (exhale, inhale?), alveoli, Digestion, enzymes, absorption, Heart, vein, artery, capillaries, Bone, skeleton, Muscle, tendon, ligament, cartilage, Muscle, moment, pivot Neuron, reflex, response, Reproduction, Sperm, ovum, fertilisation, Variation, evolution, adaptation, Puberty, adolescence, hormones, Oestrogen, progesterone, LH, FSH. Pregnancy, placenta, foetus,
		Recall quiz x 2 Assessment focussed on describing and comparing body systems
		Reading task



Interpret data, linking in scientific concepts		Recall quiz x2 Revision for end of term assessment