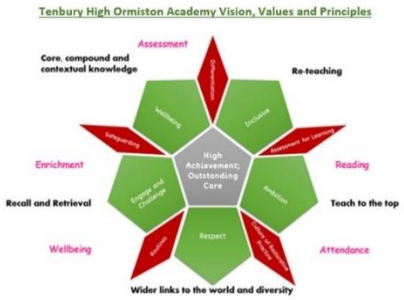
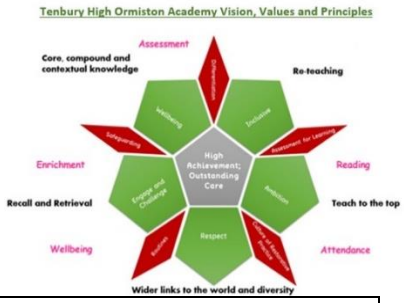
TENBURY HIGH
ORMISTON ACADEMY



Curriculum Overview for Science
Year 7

Half Term 5: Land vs Sea **Substantive Knowledge:** ❑ Discuss some of the pollution that human release. ❑ Describe how genetics are passed from parent to child ❑ Describe how animals and plants are adapted. ❑ Describe how objects can have different densities ❑ Explain why some objects float and other sink. ❑ Describe how tectonics plates move. ❑ Describe how sedimentary, igneous and metamorphic rocks are made. ❑ Describe how rocks are weathered and eroded. ❑ Describe the rock cycle. **Disciplinary Knowledge:** Use of quadrats Draw a punnet square. **Can we Live on Mars?** **Substantive Knowledge:** ❑ Describe mass and weight **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.		Model reading and highlighting to pick out key details, reading of data, Skim reading
		Photosynthesis Respiration Genes Haploid Adaptation Natural selection Extinction Extremophile Sampling Quadrat Convection Igneous rock Sedimentary rock Metamorphic rock Weathering Erosion Deposition Cementation Rock cycle
		End of unit assessment Recall Test
		Article Homework to promote reading like a scientist Revision for end of unit assessment
Half Term 6: Can we Live on Mars? **Substantive Knowledge:** ❑ Describe mass and weight ❑ Describe content of a healthy human balanced diet. ❑ Explain consequences of unbalanced diet. ❑ Describe photosynthesis and explain how to maximise it. ❑ Describe how to create pure substances (e.g potable water). ❑ Describe and explain simple techniques of separation. ❑ Describe the Earth and atmosphere (structure and composition). ❑ Explain which of the Earth's resources we use most. ❑ Describe motion and forces using diagrams and graphs. ❑ Recognise when forces are balanced and unbalanced. ❑ Explain how resultant forces impact motion. ❑ Describe the Earth's tilt, gravity and other features. ❑ Explain how the Earth's features impact things like seasons, year length and day length.		Model reading and highlighting to pick out key details, reading of data, Skim reading
		Mass Weight Force diagram Resultant force Drag Solar System Extra-terrestrial Atmosphere Living Resource Respiration Food group Diet Deficiency Inhale Exhale Glucose



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. .		Photosynthesis Fertiliser Yield Rate Pure Food miles Sustainable Population Overuse
		End of unit assessment Recall Test
		Article Homework to promote reading like a scientist Revision for end of unit assessment