2023/24 THE HAYLING COLLEGE- SCIENCE. YEAR 8

	AUTUMN TERM			SPRING TERM			SUMMER TERM	
TOPICS	**EARTH STRUCTURE AND CLIMATE**	**DIGESTION**	**METALS AND NON-METALS**	**ELECTRCITY & MAGNETISM**	**BREATHING**	**ELEMENTS & PERIODIC TABLE**	**LIGHT**	**PHOTOSYNTHESIS & RESPIRATION**
THE BIG QUESTION	How are materials recycled in the rock cycle?	How does the body break down the food you eat?	What are the patterns in the reaction of metals?	How can you make a magnet strong enough to lift a car?	How does the body exchange gases with the environment?	What are the patterns in the properties of elements?	What is light?	How do plants make their own food?
ACQUIRED KNOWLEDGE **Includes disciplinary (skills based) and substantive precise outcomes for each knowledge bloke. Alongside opportunities to explore SMSC related subjects when appropriate.**	Use the reactivity series to describe how different metals can be extract from their ores. And explain how fossil fuels are created burnt as a part of the carbon cycle.	Recognise the key organs in the digestive system and sequence the stages of enzymes-controlled digestion.	Describe the different properties of metals and non-metals, including how their position on the periodic table effects their reactivity	Investigate properties circuit electricity, and link to induced magnetism	Sequence the path of oxygen through the organs of our respiratory and cardio-vascular system and understand how our lifestyle can impact health	Explore the layout of the periodic table, its history, and how it is used by scientists	Describe how light travels and can be used to transmit information. Make measurements to show how reflection, lenses and fibre optics work.	Explore how the process of photosynthesis allows plants to produce glucose from CO_2 and water using light energy.
ASSESSMENT **Formative assessments are accompanied by a question level analysis and teacher feedback. This is graded using our EDSM criteria and reported to parents termly.**	earth structure and climate end of topic formative assessment	digestion end of topic formative assessment	metals and non-metals end of topic formative assessment	magnetism end of topic formative assessment	breathing end of topic formative assessment	periodic table end of topic formative assessment	light end of topic formative assessment	photosynthesis end of topic formative assessment & Summative end of year exam
RECIPROCAL READING **Each topic is accompanied by a set of key words and a reciprocal reading exercise.**	What is global warming?	Are all microbes inside us good?	What are superconductors?	Can magnets make helmets safer?	Are vapes toxic?	Why do some metals have a blast in water?	What are fibre optics?	Can any animals photosynthesise?
HOMELEARNING **Students are expected to study up to an hour each week**	Fortnightly SENECA tasks	Fortnightly SENECA tasks	Fortnightly SENECA tasks	Fortnightly SENECA tasks	Fortnightly SENECA tasks	Fortnightly SENECA tasks	Fortnightly SENECA tasks	Fortnightly SENECA tasks