South Hunsley School – Science Department Rationale

Our Values: Learning, Potential, Community

Welcome to the Science Curriculum

"Science is the best idea humans ever had. The more people who embrace that idea, the better"

Bill Nye

Science allows us to gain a greater understanding of the world that we live in, providing pathways to explore how and why different concepts and phenomena occur. Science is a subject that is continually evolving in the world around us. As scientists, with our powerful knowledge, we can find solutions to many of the challenges facing our local and global communities.

Science at South Hunsley School

Our aim is to encourage and develop student's knowledge and understanding of how science affects the world that we live in. Our curriculum is designed to promote a love of science, encouraging students to pursue further options within science. Our curriculum allows students to develop their knowledge and understanding of science across all three science disciplines: Biology, Chemistry and Physics. Our curriculum also allows students to develop transferable scientific skills (disciplinary knowledge of science).

Learning – a love of learning of science and developing an inquisitive nature of the world around us
Potential – science is open to all students regardless of their prior knowledge, background and abilities
Community – science directly impacts the communities that we live in and the lives we live

South Hunsley School & Sixth Form College - Science Department

Science - Curriculum Map

Year 7 (2020-21)	Year 8 (2021-22)	Year 9 (2022-23)	Year 10 - TRILOGY PATHWAY (2023-24)	Year 10 - SEPARATE PATHWAY (2023-24)	Year 11 - TRILOGY PATHWAY (2024-25)	Year 11 - SEPARATE PATHWAY (2024-25)
Biology Topics:	**Biology Topics:**	**Biology Topics:**	**Biology Topics:**	**Biology Topics:**	**Biology Topics:**	**Biology Topics:**
Cells	Human Body	Cell Biology	Organisation - part 2	Organisation - part 2	Homeostasis - Hormones	Homeostasis - Hormones
Systems	Photosynthesis & Respiration	Organisation	Bioenergetics	Bioenergetics	Inheritance, Variation & Evolution	Inheritance, Variation & Evolution
Fertilisation	Genetics & Evolution	Infection and Response	Ecology - part 2	Ecology - part 2		
Relationships in Ecosystems		Ecology *(Covered in Environmental Science lessons)*	Homeostasis - Nervous system	Homeostasis - Nervous system		
Chemistry Topics:	**Chemistry Topics:**	**Chemistry Topics:**	**Chemistry Topics:**	**Chemistry Topics:**	**Chemistry Topics:**	**Chemistry Topics:**
Science Skills	The Periodic Table	Atoms, Elements and Compounds	Atomic Structure & The Periodic Table	Atomic Structure and The Periodic Table	Reversible Reactions & Equilibrium	Electrolysis
Solids, Liquids, Gases	Earth's Atmopshere	Atomic Structure	Bonding & Structure	Bonding and Structure	Electrolysis	Further Organic Chemistry
Atoms, Elements, Compounds	Introduction to Chemical Reactions	The Periodic Table	Organic Chemistry	Organic Chemistry 1		Chemical Analysis
Acids and Alkalis	Further Chemical Reactions	Rates of Reaction	Energy Changes	Energy Changes		Materials and Resources
Separating Mixtures		Earth's Atmosphere *(Covered in Environmental Science lessons)*	Quantitative Chemistry	Quantitative Chemistry		
		Earth's Resources *(Covered in Environmental Science lessons)*	Reactions of Metals	Reactivity of Metals		
		Water *(Covered in Envrionmental Science lessons)*	Reactions of Acids	Reactions of Acids		
				Equilibrium		
Physics Topics:	**Physics Topics:**	**Physics Topics:**	**Physics Topics:**	**Physics Topics:**	**Physics Topics:**	**Physics Topics:**
Introduction to Energy	Further Electricity	Particle Model	Partcle model	Particle model	Waves	Waves
Introduction to Electricity	Further Energy	Forces	Circuits	Circuits	Forces and motion	Static electricity
Forces and Motion	Forces and Motion	Electricity	Nuclear model	Nuclear physics	Magnetism	Nuclear physics
	Waves	Energy	Forces and motion	Magnetism		Astrophysics
		Waves	Waves			Magnetism
		Magnetism (Left from Year 8)				Mechanics
		Energy Resources *(Covered in Environmental Science lessons)*				
		Electricity in the home *(Covered in Environmental Science lessons)*				