



Thomas Harding Junior School Science Progression Overview

Rationale

Science at Thomas Harding follows the National Curriculum and develops the knowledge and skills of all children, including SEN/PP, to succeed in their learning. The skills and knowledge are embedded and **built upon** throughout the school with some topics being **revisited** for children to explore on a deeper level, for example electricity. Lessons and topics are **ambitious** and designed to improve the children's cultural capital enabling them to **transfer skills** across subjects and into later life. The Science curriculum embeds ASPIRE, especially children's **independence and resilience** when carrying out **pupil-led investigations** and exploring their own scientific enquiries.

Topics	Year 3	Year 4	Year 5	Year 6
Plants	Conditions for growth Functions of parts Life cycles			
Living things and their habitats		Human influence Classification	Life cycles Reproduction	Classification Why we classify
Animals including humans	Nutrition Skeletons Muscles	Digestion Teeth Food chains	Human life cycle	Circulation Health How nutrients are transported
Rocks	Properties Fossils			
Evolution and inheritance				Variation Adaptation Evolution Looking at fossils

States of matter		States of matter Changes of state – heating / cooling Water cycle	Changes of state Separation Dissolving	
Materials and properties			Properties Uses of materials Classification of material	
Light	Light sources Shadows Reflections			Light travels in straight lines Reflection and how we see Shadows
Electricity		Simple circuits Conductors and insulators		Symbols for components Brightness of a lamp - voltage Changing circuits
Sound		Vibrations Pitch Volume		
Earth and Space			Earth, Sun, Moon Day, night, year	
Forces and magnets	Magnets have 2 poles Attract / repel Magnetic materials Friction		Air resistance, water resistance, gravity, friction Mechanisms	

Rows – Directly building on prior knowledge in later year groups

Highlighted parts – Links with other topics eg children will learn about properties of materials in Y5 but previously would have looked at magnetic materials (Forces) and conductors / insulators (Electricity).