

Science

Intent	Implement	Impact
Higher Walton's Science curriculum fosters excitement and curiosity about natural phenomena while emphasizing the role of the scientific community in shaping our past, present, and future. It seeks to provide students with a comprehensive understanding of Biology, Chemistry, and Physics, coupled with a broad range of scientific skills applicable beyond the classroom The curriculum is inclusive, ensuring all students can experience the joy of science and connect their learning to real-life situations. By studying science, children learn to appreciate how new knowledge and skills can address global challenges. Moreover, the	Higher Walton's Science Curriculum uses Kapow Primary's Scheme of work, which is designed as a spiral curriculum, meaning that essential knowledge and skills are revisited and built upon with increasing complexity. This approach allows students to reinforce their understanding while tackling more challenging concepts. Engaging recall activities help students reflect on what they have learned previously, boosting their confidence as they approach new material. The curriculum emphasizes making science relevant and inspiring for students through real-world applications, and it includes cross-curricular connections to	Pupils should leave school equipped with the requisite skills and knowledge to succeed in key stage 3 Science. They will have the necessary tools to confidently and meaningfully question and explore the world around them as well as critically and analytically experiencing and observing phenomena. Pupils will understand the significance and impact of Science on society. Children will: ● Develop a body of foundational knowledge for the Biology topics in the National curriculum: Plants; Animals, Including Humans; Living Things and Their Habitats; Evolution and Inheritance. ● Develop a body of foundational knowledge for the Chemistry

curriculum encourages critical thinking, empowering students to question and understand the world around them. Key focuses include developing knowledge and skills across scientific disciplines, nurturing curiosity, challenging misconceptions, and fostering continuous progression through practical and investigative activities. Our curriculum aligns with National Curriculum targets and aims, aiming to equip students with the scientific literacy and skills needed for future success.	help students see how science connects to other subjects. Each Kapow unit in the Science curriculum centres on Biology, Chemistry, or Physics and is organised around six core science areas: Plants, Animals (including humans), Living things and habitats, Materials, Energy, and Forces, Earth, and Space. Through hands-on activities, students delve into these subjects while learning specialized vocabulary to enhance their comprehension. The curriculum seamlessly blends "working scientifically" skills with conceptual learning, offering students numerous chances to hone their scientific inquiry abilities. Practical activities and full investigations are woven into the curriculum to bolster skill development.	topics in the National curriculum: Everyday Materials; Uses of Everyday Materials; Properties and Changes of Materials; States of Matter; Rocks. ● Develop a body of foundational knowledge for the Physics topics in the National curriculum: Seasonal Changes; Forces and Magnets; Sound; Light; Electricity; Earth and Space. ● Be able to evaluate and identify the methods that 'real world' scientists use to develop and answer scientific questions. ● Identify and use equipment effectively to accurately gather, measure and record data. ● Be able to display and convey data in a variety of ways, including graphs. ● Analyse data in order to identify, classify, group, and find patterns.
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	"Making connections" units provide students with optional opportunities to delve deeper into topics beyond the core curriculum, reinforcing their existing knowledge and skills while igniting their enthusiasm. Lessons within these units employ a variety of teaching methods to accommodate diverse learning styles, including independent tasks, group work, and hands-on activities. Kapow Primary's Science program offers robust support for teachers to tailor lessons to meet the diverse needs of students. This includes tools like knowledge organizers to highlight curriculum connections and resources such as teacher videos and CPD support to deepen subject knowledge and tackle misconceptions. The program is	● Use evidence to formulate explanations and conclusions. ● Demonstrate scientific literacy through presenting concepts and communicating ideas using scientific vocabulary. ● Understand the importance of resilience and a growth mindset, particularly in reference to scientific enquiry. ● Meet the end of key stage expectations outlined in the National curriculum for Science.
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	designed to empower all teachers, even those without specialist backgrounds, to deliver a well-rounded curriculum and support student advancement effectively	
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