

Progression in Science – HEP Curriculum (EYFS – Year 6)

EYFS (Nursery – Reception)

In the Early Years, science learning is rooted in the Understanding the World strand of the EYFS Framework. Children begin to observe, question, and make sense of their immediate environment. Through exploration, play, and talk, they learn to describe what they see, compare materials, and begin to notice change. By the end of Reception, pupils use early scientific vocabulary, make simple predictions, and demonstrate curiosity about the natural world — preparing them for the structured enquiry skills introduced in Year 1.

Year Group	HEP Units	Knowledge and Skills Progression
Nursery	Exploring Our World / Weather Watchers / Growing and Changing / Exploring Materials / Water and Weather Play / Caring for Our Planet	Explore using senses, make observations, describe textures and changes, begin to ask questions, develop care for living things.
Reception	Our Wonderful World / Seasonal Changes / Investigating Materials / Growing and Changing / Animals and Their Young / Summer and Our Environment	Observe and describe changes over time, classify materials and living things, use early scientific language, begin simple testing through play.

Key Stage 1 (Years 1 – 2)

At Key Stage 1, pupils build on their natural curiosity through hands-on exploration. They learn to ask simple questions, make observations using equipment, and record findings using drawings, symbols, and simple charts. Scientific enquiry is introduced through practical contexts — especially in the Park Explorers and Zhi Grows a Plant units — to embed early understanding of classification, pattern seeking, and change over time.

Year Group	HEP Units	Knowledge and Skills Progression
Year 1	Park Explorers / My Body and My Senses / Everyday Materials / Animal Groups / Animal Diets / Seasonal Changes	Observe and identify living things and materials; use senses to explore; record with drawings; begin to group and classify; recognise patterns.
Year 2	Zhi Grows a Plant / Uses of Everyday Materials / Animal Survival / Habitats and Microhabitats / Changing Seasons / Growing Scientists	Perform simple tests, record and describe results, identify and compare materials, understand simple food chains, observe growth and seasonal change.

Lower Key Stage 2 (Years 3 – 4)

In Lower Key Stage 2, pupils deepen their understanding by exploring cause and effect. They learn to set up fair tests, collect and present data, and use evidence to draw conclusions. Working Scientifically skills are applied across a broad range of HEP units such as Forces and Magnets, Light, and Sound, building independence and accuracy in practical work.

Year Group	HEP Units	Knowledge and Skills Progression
Year 3	Plants / Rocks and Fossils / Light / Animals Including Humans (P3) / Forces and Magnets / The Bee Project	Set up simple comparative tests; make systematic observations; measure accurately; record using tables; recognise patterns; draw evidence-based conclusions.
Year 4	States of Matter / Animals Including Humans (P4) / Sound /	Plan enquiries; measure using standard units; use classification keys;

Living Things and Their Habitats / Electricity / History of Science

record and interpret data; construct simple circuits; explain processes using evidence.

Upper Key Stage 2 (Years 5 – 6)

By Upper Key Stage 2, pupils apply their knowledge to explain increasingly complex phenomena and use evidence to justify conclusions. They plan and carry out investigations with controlled variables, take accurate measurements, and evaluate the reliability of their results. The HEP curriculum ensures secure coverage of biology, chemistry, and physics through contextual and synoptic units such as The Scientific Method and Preparing for Secondary Science.

Year Group	HEP Units	Knowledge and Skills Progression
Year 5	Properties and Changes of Materials / Animals Including Humans / Forces / Living Things and Their Habitats / Earth and Space / The Scientific Method	Plan fair tests with control of variables; collect and analyse data; identify patterns and relationships; explain results using evidence and precise vocabulary.
Year 6	Animals Including Humans / Light / Electricity / Evolution and Inheritance / Living Things and Their Habitats / Preparing for Secondary Science	Plan and conduct independent enquiries; measure with precision; evaluate reliability; apply understanding across domains; communicate findings in written and verbal forms.