Updated 2022-23

CURRICULUM SUMMARY Science – Years 3-6 Overview

	Year 3	Year 4	Year 5	Year 6
Science	**Animals and humans** Nutrition and the human body **Plants** Functions of plants **Rocks** Properties of rocks Fossils **Magnets and Forces** Magnetism and attraction **Light** Shadows and reflection	**Animals and humans** Teeth Food chains Digestive system **Living things and their habitats** Classification Characteristics of plants and animals **Sound** How sound travels Pitch and volume of sound **Electricity** Circuits **States of Matter** Changing states of material and water	**Properties and changes to materials** Dissolving, separating, states of matter Reversible/irreversible changes **Forces** Gravity Friction **Earth and space** Planets Moon cycle Earth Sun **Living things and their habitats** Life cycles Local environment	**Electricity** Designing/changing circuits **Light** How light travels and is seen. **Evolution and inheritance** Adaptation of humans/animals **Living things and their habitats** Classification **Animals, including humans** Functions of organs Healthy lifestyle

Our rationale for sequencing the subject in this way

The science curriculum at Whitehall Junior School has been designed to ensure that pupils are able to build their knowledge and understand the concepts that underpin them. The curriculum is structured to incorporate the three main areas of science: biology, physics and chemistry. It uses aspects of the 'Switched on Science' curriculum but has been adapted and designed to best meet the needs of the learners at our school.

Each science topic has been planned so that pupils are able to learn and understand scientific concepts; they are then able to investigate and discover scientific evidence through a variety of practical lessons. The rationale behind this learning is to support the children understand the science behind the idea. Further to this, they will develop their own questions and answers from what they have discovered, either backing up their learning and knowledge, or questioning the initial idea or concept. Each area within science has been developed so that the pupils are able to build on their previous learning in EYS and KS1. In KS2, new areas of study are introduced and these are then revisited within the Key Stage or introduced as standalone units of study. The lessons are planned to promote the importance of the subject, with both written and practical elements planned explicitly. In lessons, pupils build on their scientific skills as they progress throughout the school. For example, in lower Key Stage 2, pupils use fair tests and make predictions, whereas in upper Key Stage 2, pupils will plan scientific enquires identifying different variables as an integral part of this process.

Summative assessments (using the 'Switched on Science' assessments) are planned into the end of each unit of study. As part of the science policy, a standardised marking scheme is used across the school for consistency. Formative assessment gives scope for a pupil to be assessed against the skills that they are able to apply in class, in conjunction with their scientific methodology, reasoning and knowledge.