SCIENCE AT HIGH CLARENCE

Our Science curriculum is designed to develop curiosity and fascination about the world and its people and develop a greater understanding of scientific concepts. They will develop a sense of excitement and curiosity.

Big Ideas

- **Observation** (using our senses, recording information, data)
- **Prediction** (a statement about the future, based on facts or evidence, possibilities)
- **Investigation** (a quest to find the answer to a question using a scientific method)
- **Scientific Skills** (concepts, enquiry, classify, interpretation)
- **Great Scientists** (Charles Darwin)

Organisation and Sequencing

2 lessons per week

- Content of the National curriculum and to ensure our children have an accurate understanding of the scientific concepts of the world in which they live.

Scientific Studies in FS & KS1

- Foundation Stage explore scientific concepts through play and investigation
- study Seasonal changes, Everyday Materials, Plants, and Animals inc Humans
- study Uses of Everyday Materials, Plants, Living Things and their Habitats and Animals inc Humans
- **Scientific Studies in KS2**
- LKS2 study Forces and Magnets, Light, Plants, Rocks and Animal inc Humans
- LKS2 study Animals inc Humans, states of Matter, Electricity, Living things, and their Habitats, Sound
- UKS2 study Properties and changes of Materials, Forces, Earth and Space, All Living Things and their Habitats, Animals inc Humans
- UKS2 study Evolution and Inheritance, Light, Living things and their habitats, Electricity and Animal Incl Humans

Links with other subjects

- Science links to other subjects have been deliberately planned
- Science and DT are so closely linked in our curriculum we teach STEM subjects together where possible- Electricity in LKS2 and UKS2, food tech across the year groups
- Plants, habitats and living things linking with Geography climate and biomes work
- The links are made using vocabulary across all subjects

Retrieval Practice

- Knowledge, skills and vocabulary identified
- Knowledge organisers used to support recall and retention
- Low stakes quizzing to develop long term memory
- Key concepts identified (above) are revisited
- Key ideas are investigated by considering what they are and what they are not
- Links across year groups for retrieval of knowledge

Assessment/Intervention

- Pupil and staff voice tells us what is working well.
- Gaps are identified through end of unit assessments, enquiries, assessment for learning in lessons and outcomes of retrieval practice.
- Rapid responsive intervention takes place in the form of pre-learning, personalised provision.
- Intervention can simply be adapted questions, scaffolds, additional/less instructions

Accessibility

Everyone has access to the Science curriculum at the same pace.

Support is provided for those learners who require it- scaffolds are used to develop a secure understanding.

Considerations is given for learners who grasp concepts more rapidly- questions are used to deepen learning