

## Science at Stubbin Wood

We use Cornerstones for our science curriculum which provides a progression framework from Nursery to Year 9 based on the national curriculum programmes of study (PoS) and Development Matters. We have made adaptations to meet the needs and interests of our learning community.

Our framework maps out each child's learning journey through a sequence of projects that develop key concepts, skills, and core knowledge. These projects are carefully ordered to build both substantive and declarative knowledge, and where possible, create meaningful links with other areas of learning. This approach enables children to apply and embed their scientific understanding in new and real-life contexts.

### What we cover in science:

- Animals inc humans
- Earth and space
- Everyday materials
- Electricity
- Evolution and inheritance
- Forces
- Light
- Living things and their habitats
- Plants
- Properties and changes of materials
- Rocks
- Seasonal changes
- Sound
- States of matter

### Building scientific understanding

The sequencing of projects ensures that children have the substantive knowledge and vocabulary to fully access subsequent projects fully. Each project's place in the year has also been carefully considered. For example, projects that involve growing plants or observing animals are positioned at a suitable time of year to give children the best possible opportunity to make first-hand observations. Within all the science projects, disciplinary knowledge is embedded within substantive content.

The key concepts ('big ideas') covered within the science curriculum are:



Humankind



Processes



Creativity



Investigation



Materials



Nature



Place  
and space



Comparison



Significance



Change

These are then linked to smaller concepts/aspects of science:

- Changes
- Earth
- Forces
- Gather and record ideas
- Habitats
- Healthy lifestyles
- Human body
- Identification and classification
- Investigation
- Living things
- Measurement
- Modelling
- Nutrition
- Observation
- Parts and functions
- Pattern seeking
- Phenomena
- Physical things
- Properties and uses
- Questioning
- Record and conclude
- Staying safe
- Survival

Each smaller concept/aspect is then broken down further into the skill and core knowledge statements that form the subject progression framework.

### **Stage not age**

We have tailored the Cornerstones framework to the profile of our learners and whilst content is determined by subject leaders to enable our progression of knowledge and skills model, it is individual teacher's responsibility to determine the appropriate skill and knowledge statements for individual learners. We plan to learners' cognitive level of understanding rather than chronological age.