

Science *on a Page*



Intent: How Science contributes to our school's vision

At Lady Boswell's, the Science Curriculum provides a unique opportunity to contribute to the school's vision and achieve our 'seven gifts'. Our Science curriculum enables children to think creatively to understand and explore the world around them. Through practical investigations, observations and collecting evidence children develop a **thirst for knowledge and love of learning**. Children regularly use a range of scientific enquiries and present their findings, individually and in groups, becoming effective **collaborators and communicators**. Science encourages the children to be curious about scientific phenomena, engaging in questioning that allows them to become **confident problem solvers**. By regularly being exposed to scientific vocabulary, rich discussion and current research about science based issues which affect their lives now and in the future, children become responsible **global citizens** concerned about the planet's future. Through their work in science, children gain the knowledge and understanding to begin to make sense of events in our world and are regularly exposed to inspiring individuals which increases their science capital. Our staff and students vision reflect Science at Lady Boswell's: "Through a hands-on, enquiry-based curriculum, pupils will experience the joy of questioning, exploring, investigating and learning about the world around them"

Golden Threads

Biology

Chemistry

Physics

Earth Sciences



Implementation: How the curriculum is organised

The science curriculum is organised in line with our Curriculum Policy. The **National Curriculum** has been further enhanced by our school curriculum within a **Science Knowledge Progression** document and the use of **The Education People Primary Science Scheme of Work**. The Subject Leader has arranged the knowledge into topics for each year groups. Teachers use these documents to inform their **Unit Plans**. **Knowledge Organisers** that summarise key learning are built and shared with pupils and parents.

EYFS

Our Science curriculum builds upon the foundations of the EYFS 'Understanding the World'. Children will enter Year 1 having developed an understanding of how to ask questions about what they have observed.

Children are introduced to Science indirectly through activities, play and exploration. The EYFS cultivates a positive attitude towards scientific exploration.

Vocabulary

Carefully sequenced and explicitly taught vocabulary is essential in children building the schemas necessary to retain the subject knowledge and complete investigations required for Science.

Vocabulary is progressively organised, tiered (2: new language required for knowledge acquisition, 3: highly specific or disciplinary language) and included on Knowledge Organisers and Displays.

Including all learners

At Lady Boswell's we believe that *all* pupils should have equal opportunity to access every subject and recognise that often pupils who can find reading and writing challenging can have high levels of interest or skill in knowledge rich subjects like Science.

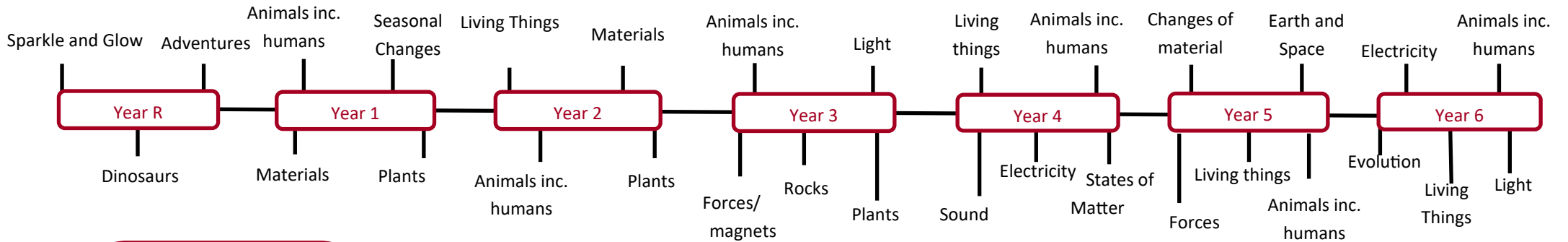
Teachers are responsible for ensuring all pupils are supported and challenged in Science. This will be through careful task design and alternative recording methods.

Subject Leaders are responsible for monitoring the inclusion of pupils with additional needs and high interest or skill and will work with teachers and our SENCO to make the necessary adjustments to the curriculum.





Topics are arranged by year group and form the basis of cross-curricular work, where appropriate.



Enrichment and Cultural Capital

We actively plan experiences that bring learning to life, increasing Science capital and creating life long memories for our pupils.

Children participate in a number of trips throughout their time at Lady Boswell's, including attending Science shows and workshops.

Every week, children are given the opportunity to practically explore enquiry questions.

Children also regularly welcome and learn from 'experts' during an annual STEM week and through assemblies.

Assessment

The Science Curriculum aims to develop pupil's enquiry skills and therefore assessment follows the same approach, in line with our curriculum policy. Teachers will plan assessment activities that meet the underpinning pedagogy of retrieval practice, will run regular vocabulary checks and mini quizzes, will use task design as a formative assessment tool and allow time for independent practical enquires. Tasks will be adapted to match pupil's current levels of knowledge. End of unit assessments will adopt Solo Taxonomy approaches in Hexagonal Thinking tasks.

Ensuring Impact in Science

Subject Leaders will work alongside Implementation Team Leaders to ensure that the Science Curriculum is implemented in line with the policy and continues to meet the needs of our stakeholders. This will be through pupil voice activities, book looks, monitoring of planning, lesson visits and developmental observations. They will work with Curriculum Committee Governors to carefully review Science and its impact.

Impact of the curriculum



Use a variety of scientific methods, using equipment confidently and collaboratively.



Confidently ask and explore questions about scientific phenomena.



Make links across subjects and to the world around them



be confident communicators

The Science Curriculum will enable our pupils to...



Develop their science capital to become responsible global citizens.



Have a deep understanding of scientific vocabulary

