

Intent:

Believe

Children will have the scientific knowledge and a secure understanding of the scientific method to be able to hypothesize, analyse and make sense of the world around them.



Achieve

Children will develop a sense of deep curiosity and a love to investigate and deepen their understanding of how the physical world works.



Aspire



Children will learn to become critical thinkers and approach scientific enquiry with an understanding of the different variables and biases that can influence results.

At St Buryan Academy, we have developed a science curriculum that inspires a deep love of science and also raises children's aspirations and understanding regardless of ethnic origin, gender, class, aptitude or disability. We aim to ensure that all children are equipped with the scientific skills required to understand the uses and implications of science, today and for the future and foster an awareness of the different pathways that can lead to a career in science.

- Every child receives a minimum of 1-hour high quality science teaching per week.
- Science is taught accurately and systematically both within and across each year group and key stage so that new knowledge is built upon the secure foundation of established understanding.
- Science Teaching is underpinned by pedagogical knowledge of how teacher questioning can guide learners.
- To ensure developmental feedback is consistently high quality throughout the School and extends and develops pupils' ability to link new knowledge into existing understanding
- To develop a vocabulary-rich and investigation-rich science curriculum which allows pupils to apply their theoretical understanding to a range of experiments and understand how difference variables can affect their results.
- To provide the opportunity for each year group to study the work of prominent scientists and appreciate their contribution to world around them, raising the profile of science in society.

Implement:

Coverage through Science curriculum & extra-curricular:

- Class teachers ensure that every pupils receives at least one hour of high quality science teaching every week.
- A whole school science overview is followed by all year groups in order to ensure that the national curriculum is covered thoroughly and systematically and that knowledge and understanding that has been acquired in previous year groups is deepened and built upon in subsequent ones.
- The Grammasaurus scheme of work is available to all teachers to assist with planning and subject knowledge. Teachers are also encouraged to develop bespoke lessons in science based on their deep understanding of the curriculum and the specific needs of their individual classes.
- Science events in co-operation with local secondary schools take place every year, which inspires our pupils to engage more deeply with science, increases science capital and raises the profile of the subject.

Assessment:

- Science Lessons are evidenced in Science books every week.
- End of unit assessments inform teacher assessment.
- Concise learning objectives and success criteria are available each lesson for each pupil to assess their understanding against.

Monitoring:

1. Science 'book looks' ensure high quality teaching is taking place in every year group every week and ensure systematic coverage of the science curriculum.
2. Drop in sessions and lesson observations.
3. Professional conversations between teachers supporting and inspiring each other in delivery of interesting and inspiring science lessons.

Impact:

Data (2022/23):

Data to be entered at the end of the academic term.

Monitoring to take place termly.

Feedback from children shows that they enjoy learning science:

"I like to learn how things work; I remember experiments with balloons. We filled them with different liquids and my group's didn't burst."

"I liked when we were learning about shadows. We had different objects like basketball and cones and we measured the shadow at different times of the day."

Community/families:

Porthcurno Museum – Y5-6 class visited the museum and carried out variety of science investigations and games. They also celebrated Earth Day with a performance.

Current Priorities and Next Steps

1. **To plan and deliver a whole school Science Fair to involve families and the community.**
2. **To develop partnerships with local secondary schools and businesses which will both inspire and inform our pupils with regards to the different pathways that can lead to a career in science.**