



## ***'Spurring each other on with love'***

**By following the 2014 National Curriculum for science, we at Bickleigh Down aim to ensure that all pupils:**

- Use the different types of science enquiries to both ask and answer scientific questions about the world around them.
- Possess a secure understanding of the scientific knowledge and conceptual understanding of the specific disciplines.
- Are equipped with the scientific knowledge and relevant scientific vocabulary to understand the uses and implication of science, today and for the future.

### **Intent**

*At Bickleigh Down, we have a clear vision that our Science curriculum should enable all of our children to have the opportunity to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. We believe and promote the idea that everyone is a scientist, and that all pupils are capable of achieving high standards. Excitement and curiosity are at the heart of our science lessons, encouraging our scientists to recognise the power of rational explanation, and to question natural phenomena.*

***A Scientist from Bickleigh Down will be able to:***

- ***think creatively, rationally and critically;***
- ***use different types of scientific enquiry to answer questions;***
- ***hypothesise, test, present and reflect on scientific ideas in light of their own findings or those gained from others;***
- ***describe associated processes and key characteristics using both common language and technical terminology;***
- ***collect, present and analyse data, with reference to their mathematical knowledge to seek answers to questions;***

***By the end of Key Stage One***, children will have experienced and observed phenomena, and looked more closely at the natural and humanly constructed world around them. They will have developed their understanding of scientific ideas by using the different types of scientific enquiry to answer their own questions (observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information). They will have experienced first-hand practical sessions alongside some use of appropriate secondary sources.

***By the end of Lower Key Stage Two***, children will have broadened their scientific view of the world around them by exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They will have asked their own questions about what they have observed and make some decisions about which type of scientific enquiry are likely to be the best way of answering them. They will have drawn simple conclusions and used some scientific language to talk and write about their findings.

***By the end of Upper Key Stage Two***, children will have developed a deeper understanding of a wide range of scientific ideas through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. Pupils will have encountered more abstract ideas and recognised how these ideas help them to understand and predict how the world operates. They will have begun to recognise that scientific ideas change and develop over time, as well as selected the most appropriate ways to answer science questions using different types of scientific enquiry. Pupils will have drawn conclusions based on their data and observations, used evidence to justify their ideas, and used their scientific knowledge and understanding to have explained their findings.