

Science

The scientist is not the person who gives the right answers, they are the ones who ask the right questions.

Claude Levi Strauss

Intent

At Balcombe School, it is our intention that all our pupils think of themselves as scientists. We want them to develop a love of science, have infinite **curiosity** about how our world works and grow up with **ambitions** to become astronauts, marine biologists, forensic scientists or even vaccine researchers. Our science curriculum will enable them to question why something is occurring; have the knowledge and **creativity** to be able to predict how things will behave; the skills to analyse why they do and the courage to be able to develop and explain their own conclusions. We want to provide them with opportunities to investigate their own interests and passions, empowering them to become more **resilient** in preparation for the experiences and responsibilities of later life. Furthermore, by understanding our planet and Balcombe's unique place within it, we want them to develop a deep **care** and **respect** for our world, its diversity and a desire to change it for the better.

Implementation

Learning opportunities will promote a carefully constructed progression through each class to ensure key blocks of learning, knowledge and skills are well embedded, enabling children to confidently progress to the next stage.

We know that children love science because planning, predicting, conducting and completing experiments is exciting. We will use practical methods wherever possible to ensure maximum learning. Where a more theoretical approach is required, e.g. for topics such as Earth and Space, we will ensure that we use as wide a variety of techniques (such as creating a Solar System with fruit or visiting a planetarium) as possible.

Where possible, meaningful links across the subjects will be made. For example, applying mathematical knowledge to collecting, presenting and analysing data, or using English lessons to write up experiments to reach the same high spelling, grammar and punctuation expectations. Furthermore, through meaningful discussion and high quality written work, children will extend their technical terminology and scientific vocabulary.

Sufficient time allocated to science allows for subject matter to be revisited frequently, embedding knowledge and improving the rates of progress that children make.

Impact

- Children will gain the scientific vocabulary, skills and knowledge they need to succeed at KS3 and beyond – as set out in our knowledge and skills progression documents.
- Progress will be monitored through formative assessment so that misconceptions are identified in a timely fashion and addressed directly.
- End of unit assessment tasks and a summative teacher judgement will be used to determine children's progress towards achieving the expected standard in science.