

Science – Curriculum Intent and Implementation 2019-2020

The **intent** of our Science curriculum at Chipping Sodbury School is to develop science learners who:

- are passionate scientists;
- are resilient, independent learners;
- are developing their scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics;
- use different types of scientific enquiry to answer scientific questions about the world around them;
- use technical terminology with confidence, accuracy and precision, building up an extended specialist vocabulary;
- can apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data;
- have an awareness of some of the social and economic implications of science;
- are able to progress readily to the next stage of their science learning;
- are proud of their scientific achievements;

The intent of our curriculum is **implemented** through:

- an awareness of students' KS2 Science experience and use of diagnostic tools to determine prior learning around the 'big ideas' in science;
- schemes of work which are differentiated for KS3 and include finer differentiation within each unit for Y7 and Y8;
- the expectation that students will use technical terminology in both spoken and written form routinely in lessons;
- building on prior conceptual knowledge across the 'big' ideas and making links across these to deepen understanding;
- identifying and addressing misconceptions;
- using a range of models of key concepts and phenomena;
- practical investigations to develop student's ability to work scientifically;
- developing mathematical skills and applying to their understanding of science
- the routine expectation that students will show resilience in each and every lesson and are supported in this through independent learning resources;
- the selection of contexts which relate to young people's lives and wellbeing;
- ensuring that each year group has at least one opportunity to participate in an on off-site learning experience which enhances their science learning experience;
- a reflective approach to the continuing professional development of Science teachers (an 'open classroom' policy, collaborative planning, a teaching and learning focus to all faculty CPD).