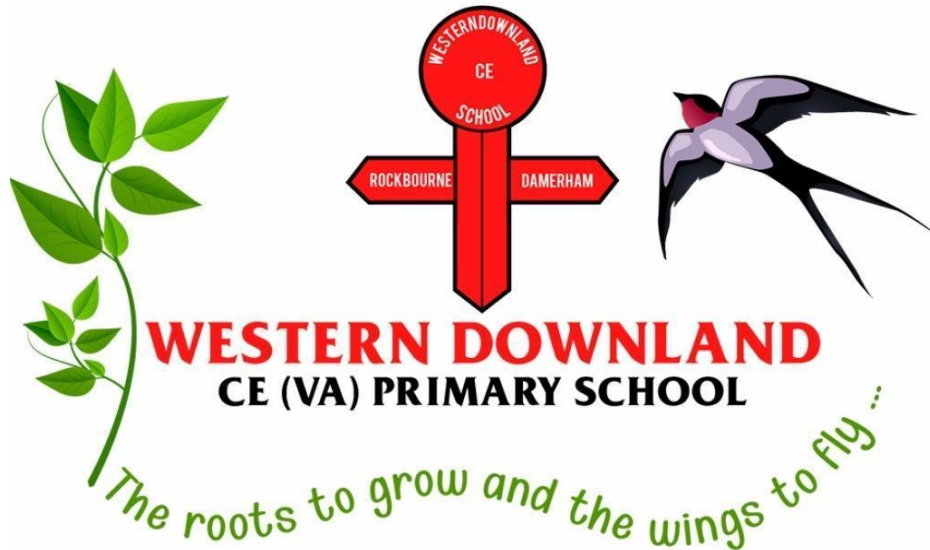


WESTERN DOWNLAND C. of E. (V.A.) PRIMARY SCHOOL

In partnership with parents we aim to provide:

'The roots to grow and the wings to fly'



Science Policy

Western Downland CE (VA) Primary School

Reviewed
Next Review

September 2022
September 2024

WESTERN DOWNLAND C. of E. (V.A.) PRIMARY SCHOOL

In partnership with parents we aim to provide:

'The roots to grow and the wings to fly'

Western Downland CE (VA) Primary School

Science Policy

1. AIMS

In line with the National Curriculum for science, at Western Downland, we aim to provide a stimulating and practical learning environment which fosters a sense of curiosity and love of natural phenomena including respect for the natural world around us.

Our science curriculum aims to build the foundations for understanding the world through the disciplines of biology, chemistry and physics. Scientific knowledge and conceptual understanding will be taught through lessons rooted in scientific enquiry, using correct vocabulary and with practical hands-on experiences.

We aim to enable children to think like scientists by the end of their time at Western Downland. Our hope is that children have a love of science and can approach the subject with enthusiasm and confidence. They will be aware of the uses of science today and its implications for the future of the world.

2. STATUTORY REQUIREMENTS

Foundation Stage

Statutory Framework for the Early Years Foundation Stage (March 2014, updated September 2021)

Key Stage 1 and 2:

Statutory requirements for the teaching and learning of Science National Curriculum 2014

3. THE GOVERNING BODY

Regular reports are made to the Governors on the progress of science provision through meetings with our Science Governor and Science Manager.

WESTERN DOWNLAND C. of E. (V.A.) PRIMARY SCHOOL

In partnership with parents we aim to provide:

'The roots to grow and the wings to fly'

4. SUBJECT ORGANISATION

Science at Western Downland is organised using the Hampshire long term planning document which sets out areas to be covered in each year group.

	<i>Autumn</i>	<i>Spring</i>	<i>Summer</i>
<i>Year 1</i>	<i>Seasons Describing materials</i>	<i>Animal survival Plants</i>	<i>Habitats</i>
<i>Year 2</i>	<i>Changing materials Making new plants</i>	<i>Animal life cycles</i>	<i>Pushes and Pulls Changing materials</i>
<i>Year 3</i>	<i>Rocks and soils Solids, liquids and gases</i>	<i>Plants and their food Plant reproduction</i>	<i>Electricity Magnets</i>
<i>Year 4</i>	<i>Digestion</i>	<i>Animal skeleton and movement Living things</i>	<i>Light Mixtures and separating them</i>
<i>Year 5</i>	<i>Making new substances</i>	<i>Space and gravity</i>	<i>Forces Controlling electrical circuits</i>
<i>Year 6</i>	<i>Fossils, classification and evolution.</i>	<i>Circulation How light behaves</i>	<i>Sound</i>

Science is taught weekly for 1 hour 30 minutes at KS1 and 1 hour 40 minutes at KS2. Knowledge is introduced sequentially, which will ensure that our children's abilities to make links and draw upon pre-existing knowledge is supported and developed, therefore making it more likely that what they are learning, moves into their long-term memory. This leads to a deeper understanding of the concepts taught.

Foundation stage

In foundation stage pupils will work from the Knowledge and Understanding of the world planning from the Early Years scheme of work. This planning aims to develop in pupils the crucial knowledge, skills and understanding that help them make sense of the world. It provides opportunities for pupils to carry out activities based on first hand experiences that encourage exploration, observation, problem solving, prediction, critical thinking, decision making and discussion. It provides the foundations for the science KS 1 and then the KS 2 curriculum. The scheme of work for KS 1 and 2 continues building on concept

5. BREADTH OF STUDY

From EYFS to the end of Key Stage Two, the children will cover a range of topics to address the requirements of the National Curriculum. These topic areas are in Biology,

WESTERN DOWNLAND C. of E. (V.A.) PRIMARY SCHOOL

In partnership with parents we aim to provide:

'The roots to grow and the wings to fly'

Chemistry and Physics. Substantive knowledge for each topic area is identified and children review their learning in order to ensure that the knowledge is retained.

In addition to this clear substantive knowledge, children will also learn the disciplinary skills needed to be a scientist. These will become increasingly more complex as they move through school:

- Asking relevant questions.
- Making careful observations.
- Taking accurate measurements
- Carrying out testing safely.
- Being able to classify and identify.
- Gathering and recording data using pictures, tables and charts.
- Representing data in various graphs: bar, line scatter graphs.

6. PARENTAL/COMMUNITY INVOLVEMENT

During science week, parents are invited to school to talk to children about how science can be used at work.

7. MONITORING AND EVALUATION

The science lead is responsible for monitoring the quality of planning, teaching and learning in the school with support from the headteacher and science governor.

Monitoring includes book scrutiny, lesson observations, pupil conferencing and data analysis.

8. ASSESSMENT, RECORDING AND REPORTING

9. Assessment for learning should occur throughout the entire science lesson, enabling teachers/teaching assistants to adapt their teaching/input to meet the children's needs. This feedback should be incisive and regular.

Pupil's work should be marked in line with the Marking Policy and should model how corrections should be made, giving children a chance to learn from their misconceptions or incorrect methods. At the beginning of each lesson, time should be given for pupils to reflect on marking and comments on the previous work.

Teachers make summative judgements against the substantive knowledge in the Hampshire planning documents, the National Curriculum programme of study as well as the Hampshire descriptors for working scientifically.

Teacher judgements are made termly and recorded on Insight.

WESTERN DOWNLAND C. of E. (V.A.) PRIMARY SCHOOL

In partnership with parents we aim to provide:

'The roots to grow and the wings to fly'

10. STAFF DEVELOPMENT

11. The Mathematics Manager and all class teachers are expected to keep up to date with subject knowledge and use current materials that are available in school or on the Standards website. Training needs are identified as a result of whole school monitoring and evaluation, performance management and through induction programmes. These will be reflected in the School Improvement Plan which includes the Science Action Plan.

10. RESOURCES

A range of resources are kept at both sites which support the different areas of study. If any further resources - consumables - are required, staff are able to order these through the school office. Items such as batteries should be given to the office so that they can be disposed of safely.

HEALTH AND SAFETY

All children are made aware of the importance and relevance of health and safety when undertaking work in science. In planning, the class teacher is expected to assess the risks and adjust their lessons accordingly to ensure safe practice and appropriate levels of supervision. The CLEAPSS website is an excellent source of information and advice about minimizing risk in Science teaching.

12. INCLUSION

At our school, we teach science to all children, whatever their ability and individual needs. Science forms part of the school curriculum policy to provide a broad and balanced education to all children.

Through our science teaching, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style and differentiation – so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs.

Individual education plans (IEP's) are created for children with special education needs. The IEP may include, as appropriate, specific targets relating to science.

12. EQUAL OPPORTUNITIES

This policy should be read in conjunction with the following school policies:

Teaching and Learning Policy

Assessment and Record Keeping

WESTERN DOWNLAND C. of E. (V.A.) PRIMARY SCHOOL

In partnership with parents we aim to provide:

'The roots to grow and the wings to fly'

Responding to pupils' work / Feedback / Marking policy

Special Educational Needs Policy

ICT Policy

Equal Opportunities Policy

Health and Safety Policy

Member of staff responsible: Jackie Miller

Date policy updated: October 2022

Date to be reviewed: October 2024