



**PINEWOOD INFANT SCHOOL AND FOUNDATION UNIT**  
**SCIENCE POLICY**

**Autumn 2018**

Science at Pinewood is fundamentally a practical part of the curriculum that enables our children to make sense of the world around them through exploration, investigation and discovery. Through 'hands-on' and meaningful experiences we seek to develop the key scientific skills of observation, questioning, exploration and investigation whilst preparing our children for life in an increasingly scientific and technological world.

**Aims**

- To prepare our children for life in an increasingly scientific and technological world
- To foster concern about, and active care for, our environment
- To help our children to acquire a growing understanding of scientific ideas
- To help develop and extend our children's scientific concept of their world through their everyday experiences
- To provide a curriculum that is coherent, flexible, progressive and applicable to each individual child

**Concepts, skills and attitudes**

- Give our children an understanding of scientific processes
- Help our children to acquire practical scientific skills
- Develop the skills of investigation - including planning, observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating
- Develop the use of scientific language, recording and techniques
- Develop the use of ICT in investigating and recording
- Enable our children to become effective communicators of scientific ideas, facts and data
- Develop a respect for living and non-living things
- Work co-operatively with others
- Build upon their own natural curiosity of the world around them and ask questions
- Tackle problems confidently
- Enjoy themselves and develop a love of science

### Foundation curriculum

Science activities are carefully planned following Development Matters in the Early Years. Children will learn about similarities and differences in relation to places, objects, materials and living things which involves guiding children to make sense of their physical world. They will talk about features of their own environment and how environments might vary from one another. They will make observations of animals and plants and explain why some things occur, and also talk about changes.

### Key Stage 1

There are two elements to Science. A body of scientific knowledge and a group of skills based processes which together help children to discover more about the world they live in. In the National Curriculum the programmes of study describe a sequence of knowledge and concepts in the following areas:

- Working scientifically
- Seasonal changes
- Living things and their habitats
- Plants
- Animals including humans
- Everyday materials and their uses

Meaningful links are made to other curriculum areas where appropriate.

### Planning

Our long term planning is linked to six half-termly topics in the Foundation Stage, Year 1 and Year 2. Within these topics there is also scientific learning that is ongoing e.g. seasonal changes. Medium term planning is created to break down the half termly learning into manageable weekly lessons with clear learning objectives. Weekly planning is then completed by individual teachers and outlines in detail the learning objectives, the learning taking place, resources, organisation and means of assessment. Science lessons are taught for approximately one hour each week and are supplemented in cross-curricular activities. Planning also ensures that links are made to computing opportunities.

As a recognised eco-school we use our school grounds to support children in fostering a love and respect for the natural environment. The children at Pinewood are continually involved in the planting and harvesting of fruit and vegetables and the growing of a range of plants and flowers is also a key part of school life.

### Assessment and recording

Assessment is on-going and is a vital tool to aid future planning. Children are assessed in their oral responses as well as their written work and each child's progress will be noted. Foundation Stage teachers will assess children using Development Matters. There are KS1 summative assessments tests available for teachers to use at an appropriate time in the children's learning. Classes in KS1 have science books which are used to gather further

assessment and recording evidence e.g. through photographs and recording. Teachers have assessment grids for each topic to note down children who is showing greater depth or below expected standard in each area. We follow statutory reporting arrangements and report each child's assessment information to the Department for Education.

#### Monitoring and evaluation

The Science Co-ordinator and Head Teacher will monitor planning and the children's work on a termly basis and key strengths will be identified along with issues for attention. Any additional actions to be taken are noted on the science action plan for that school year.

#### Role of the Science Co-ordinator

- To have a sound knowledge of the Science curriculum and the programmes of study
- To attend courses to support and extend CPD
- To provide feedback to other members of staff
- To support other staff in planning, offering advice and guidance
- To monitor planning and classroom teaching throughout school
- To order and maintain resources

Review Date: Autumn 2020

Written by: Sophie Florian