

King George V Primary School



Science policy

December 2015.

Rationale

At King George V Primary school we aim to develop pupils' curiosity, enjoyment, skills and scientific knowledge through practical approaches in which pupils raise questions and investigate the world in which they live.

Aims

In our school we aim to:

Stimulate and excite pupils' curiosity about changes and events in the world.

Help pupils to learn to question and discuss scientific issues that may affect their own lives.

Help pupils develop, model and evaluate explanations through scientific methods of collecting evidence using critical and creative thought.

Plan and carry out scientific investigations, using different equipment.

Understand the life processes of living things.

Understand the physical processes of materials, electricity, light, sound, and forces.

Know about the nature of the solar system, including the earth.

Evaluate evidence, and present their conclusions clearly and accurately.

Planning the School Curriculum

The programmes of study for Science are set out year-by-year for Key Stages 1 and 2. We are however, only required to teach the relevant programme of study by the end of each key stage. Within each key stage, we have the flexibility to introduce content earlier or later than set out in the programme of study. Teachers will base their planning on the programmes of study for their relevant year groups, but should take into consideration the ability level of children.

Early Years Foundation Stage

Understanding the world involves guiding children to make sense of their physical world and their communities through opportunities to explore, observe and find out about people, places, technology and the environment. Learning is delivered through child initiated and adult led activities with regard to the interests of the children.

Key stage 1 and 2

Science can be taught during weekly lessons or blocked depending on the unit of work being covered but should be taught for the equivalent of 60 minutes a week in Key

stage 1 and 90 minutes in Key stage 2. Science may form a main class topic, may link to the main class topic or may be taught discretely.

Key Stage 1

Throughout years 1 and 2, pupils observe, explore and ask questions about living things, materials and physical phenomena. They begin to work together to collect evidence to help them answer questions and to link this to simple scientific ideas.

Curriculum Coverage Key Stage 1:

Plants, living things and their habitats and animals including humans
Materials, forces and motion.
Seasonal changes.

Key Stage 2

From years 3 - 6, pupils build on the knowledge and skills they acquired in Key Stage 1. They make links between ideas and begin to explain their reasoning scientifically. Pupils apply their knowledge and understanding of scientific ideas to familiar phenomena, everyday things and their personal health. They think about the effects of scientific and technological developments on the environment and in other contexts.

Curriculum coverage Lower Key Stage 2:

Plants, living things and their habitats and animals including humans.
Materials, the earth, rocks, forces and magnets, light and sound.
Electricity.

Curriculum coverage upper Key Stage 2:

Plants, living things and their habitats, animals including humans, evolution and inheritance.
Properties and changes of materials, the earth, rocks and atmosphere, forces, light.
Electricity, Earth and space

Curriculum Management

The Science Lead will facilitate the development of Science in the following ways:

Managing the implementation of the Science policy.

Updating the policy and scheme of work.

Ordering/updating/allocating resources.

Keeping staff abreast of new developments.

Attending appropriate courses to update knowledge of current developments.

Keeping links with the advisory team for Science.

Contributing to the school development plan on an annual basis;

It is the responsibility of the head teacher to ensure that statutory requirements are met.

Inclusion

Planning takes into account the interests of the pupils. Pupils are able to select challenges at the correct level to form their own starting point. They self-assess to reflect on their learning. Pupils work individually, in pairs, in groups and as part of teacher-led activities. Support staff work as directed by the teacher. All pupils, including those with special educational needs, undertake the full range of activities. Activities are adapted with extension opportunities for more able learners and support strategies to cater for all abilities in line with the 2014 SEND Code of Practice.

Marking and Assessment

Science work is marked in accordance with our marking and feedback policy. Teachers are aware of the value of immediate feedback so endeavour to provide verbal feedback wherever possible.

During units of work, pupils are assessed through classroom observations of them working practically with groups or individually, through teacher questioning and through summative written assessments as pupils' progress through the school. Pupils are also encouraged to use self-assessment throughout each unit and teachers use this to identify assessment points. Assessment for learning is also used to inform the next steps.

Monitoring and Review

Monitoring is carried out by the Head teacher or the Science lead.

The following methods may be used:

Informal discussion with staff and pupils.

Scrutiny of Science planning.

Classroom observations.

Planning and teaching of science is reviewed to ensure that they are in line with the latest developments and requirements of the Science Strategy.

This policy will be reviewed at least every 2 years. Next update due: December 2017