



At Dorchester Primary, our vision is that children will become curious, creative and critical scientific thinkers who are able to explore and understand the world with a sound scientific knowledge and vocabulary.

Science Curriculum

We have carefully designed the science curriculum at Dorchester so that the EYFS key areas of learning and National curriculum key objectives are used to organise and allocate the key knowledge strands/programmes of study that must be taught in each Year group. The curriculum supports the starting points of our children and allows children to frequently revisit key skills and concepts so that they build up a deeper knowledge and understanding of the subject.

EYFS

Children will -

- be introduced to science through a range of experiences that encourage them to ask why and how questions, explore change, identify similarities and differences in the world around them.

KS1

Children will—

- Acquire subject specific knowledge and vocabulary on plants, animals including humans, materials, habitats and living things, and seasonal changes.
- They will continue to develop their scientific enquiry skills through: carrying out simple investigations which involve pattern seeking, classifying and comparing; using basic equipment and collecting data.

Lower KS2

Children will—

- Further develop subject specific knowledge and vocabulary on animals including humans, living things and their habitats and plants
- Pupils broaden their knowledge and vocabulary of new scientific concepts of light, sounds, rocks, electricity, states of matter and forces and magnets.
- They will continue to build on their scientific enquiry skills by making predictions; observing and asking questions when carrying out investigations; beginning to make accurate measurements using a range of equipment; recording and presenting their findings in different ways and making evidence based conclusions.

Upper KS2

Children will—

- Further develop their subject specific knowledge and vocabulary on animals including humans, light, living things and their habitats, electricity, states of matters and forces
- Pupils broaden their knowledge and vocabulary of new scientific concepts of evolution and inheritance and earth and space.
- They will refine their scientific enquiry skills by generating, planning and carrying out an independent enquiry; measuring results with increasing accuracy and precision, reporting on more complex data in a variety of ways.
- They will start to explore and evaluate evidence used in past and existing research.

Support

- Children develop their understanding of scientific knowledge, concepts and vocabulary in line with their age related topic but with tasks and experiences that are closely matched to their abilities
- Small steps and support is provided when necessary to allow access into age related tasks
- Children with complex needs follow a bespoke curriculum which provide learning opportunities in science but take into consideration their interests

Sequence—unit

The sequence of learning within a unit is:

- **Immersion**— students become engaged in a new topic, they activate prior knowledge, and teachers share the key unit objectives (knowledge and skills that will be addressed) through mind mapping, KWL grids, trips or wider experiences
- **Content delivery**-age related subject specific knowledge, skills and vocabulary is taught in discrete subject lessons during the block unit.
- **Reflect**- at the end of unit children and teachers reflect on learning to inform future lessons

Sequence—lesson

- **Starter**- to orientate to the subject, retrieve, revisit and review prior learning
- **Vocabulary**-introduce and review subject specific vocabulary
- **Oracy Task** -stimulus given to allow for pupil observation, exploration and discussion
- **Guided practice**-direct teaching and modelling of knowledge and/or skills
- **Independent or Collaborative work**— children practice the key skill or application of knowledge
- **Reflect**— oral reflection on learning which has taken place