

## Subject Rationale – Science (revised September 2021)

### Purpose of study

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity. All pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

### Aims

The national curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

### Intent

Our vision here at Landscape Primary is to deliver a science curriculum that inspires our children to become lifelong learners in the world around them, and give them an understanding, admiration and curiosity of the world they live in. Children are encouraged to question, experiment, reflect and aspire to stretch their learning as far as they can imagine and build their scientific knowledge. Simply, we want our children to behave like scientists – ask questions and find evidence to them! Children have the opportunity to revisit certain topics through the subject mapping across the key stages.

### Implementation

The Science curriculum is mapped across the school by the subject leader to show clear progression of the knowledge and skills needed to develop a secure understanding in order for children to progress to the next stage. It is taught as part of the theme, where possible, but in other cases as discrete topics. Science learning is linked to the world around the children giving it a real context. Each half-term Science is taught, it will have at least one investigation for the children to do. The skills for the investigation are taken from the Key Concepts sheet. More investigations will be written/presented in books as the children move through the Key Stages.

### Impact

The impact of Landscape's science teaching has been designed to develop children's skills and knowledge from Early years to Year 6. The work they carry out will inspire and promote their own curiosity when investigating. As children progress up the school they will:-

- demonstrate greater understanding with the scientific world around them by drawing on increasing breadth and depth of scientific enquiry and knowledge
- be able to work more scientifically and develop more accurate and evidence based methods and therefore results when investigating