

## Statement of Intent – Science

### **Purpose – Why is this subject important?**

- Science is an essential part of our daily lives and the economy. Our level of scientific understanding influences our views and our capacity for critical thinking when decision-making on important issues such as food, energy, public health and the environment.
- Many careers in the UK such as those in medicine and engineering are dependent on a secure scientific understanding.
- Preparation for High School
- Knowledge and understanding of the world
- Cause and effect
- Teaches logic/systematic working
- Creating solutions to solve problems
- Links to Maths, English
- Influences everyone
- Science changes our perception of the world
- Promoting curiosity – how things work
- Science is everywhere

### **Principles – What are the distinctive ways of knowing, working and learning in this subject?**

- Systematically develop and sustain learners' curiosity about the world and how natural phenomena can be explained.
- Pupils will be equipped with the scientific knowledge required to understand its uses and implications today and in the future.
- Develop understanding of the nature, processes and methods of science through a range of practical activities.
- Develop a technical vocabulary for discussing, describing and communicating their observations, ideas and conclusions.
- Applying what you have learnt to prove/disprove
- Interpreting/reading/using data to problem solve
- Researching and being critical of findings
- Reasoning/discussing/debating
- Persevering despite 'failures'
- Risk taking
- Courage in own convictions - developing predictions and conclusions

### **Expectations – What does success look like?**

- Children are in awe of and curious about the world and can explain current thinking on a wide range of natural phenomena using the appropriate technical vocabulary.
- They understand the scientific process and have the capability to raise questions and carry out age-appropriate practical investigations.
- They understand conventions for communicating their findings and can do so with clarity and accuracy.
- Progression of skills and vocabulary
- Making links/connections using prior knowledge gained through previous years and key stages
- Planning/implementing/evaluating
- Using scientific equipment
- Development of scientific language
- Recording using scientific measurements with increasing accuracy
- Justifying opinions using evidence
- Making mistakes and learning from them
- Asking questions and applying knowledge to a variety of contexts
- Growing understanding of how our world works