## Science Policy

### St John Fisher: Curriculum Rationale

Our vision and curriculum at St John Fisher strives to create a school community where children and adults reach their full potential and Shine.

Our curriculum is broad, creative and carefully planned so that progress can be made by all groups of children across the whole curriculum. Our children will know and remember more leading to greater comprehension and understanding of increasingly complex concepts.

We are committed to encouraging and developing creativity as well as academic mastery seeing both as essential for our children.

We will equip our children with skills for academic and social skills and intelligence ensuring they are ready for the next stage of the learning and life.

### St John Fisher: Science Rationale

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, and at St John Fisher, all pupils are taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They are encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

## Engagement

- Engage with the wider world- ask questions and being curious.
- Are active learners invested in their own progress and development.
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions, engaging them with the world around them.

# **High Expectations**

- Are effective and confident communicators
- Are independent thinkers and learners
- Are able to self evaluate, and reflect on their processes, conclusions, and achievements.
- Develop scientific knowledge and conceptual understanding to a high standard through the specific disciplines of biology, chemistry and physics

## Respect

- Respect for all, regardless of race, colour, culture or choices
  - Take care of and respect science equipment.
- Respect peers' ideas and contributions when carrying out investigations.

# Dignity

- Have and feel a sense of belonging and self-worth
- Have positive attitudes towards themselves and others, valuing and contributing to a diverse society
- Are self aware and can self regulate for positive emotional wellbeing and mental health

## How we will achieve this: Implementation

Key Theme	Rationale	Strategies
Reading, Communication and Vocabulary	We model and use effective communication skills to allow our children to communicate their thoughts, hypotheses and questions respectfully and clearly. There is a high emphasis placed on correct topic-specific vocabulary and that around Working Scientifically.	Sharing of expected learning and defined vocabulary through knowledge organisers.  Modelling of key vocabulary, and the expectation that it is used when discussing ideas and hypotheses.
Knowledge, Skills and Challenge	Knowledge and skills are carefully and progressively planned throughout each area of Science and year group so that skills can be built upon and strengthened. We challenge all children within Science, encouraging them to have high expectations of themselves.	Knowledge organisers set out expected learning.  Questioning in lessons and through differentiated 'next steps'.  Making links between previously taught topics, building on knowledge and vocabulary.
Teaching, Assessment and Feedback	We plan for teaching in Science using a variety of strategies, including looking for opportunities to immerse the children in a topic using the enquiry approach, or linking the Science topic to the relevant current Literacy text. Teaching and learning is underpinned by our 4 strands - High Expectations, Engagement, Feedback and Independence.  We use assessment continuously to plan and intervene and give live feedback as well as written.	Where appropriate, engaging children in science topic through inquiry approach or immersion in current Literacy text. (eg 'Animals inc Humans' through 'Bog Baby' story in Y1)  Reference to Knowledge Organisers. Assessment through retrieval quizzes.  Feedback and assessment through School marking Policy.
Attitudes to Learning and Opportunities	We are committed to building positive attitudes to learning, resilience and have developed and embedded a Learning Power approach. We reinforce positive behaviours through our Code of Conduct and classroom management techniques.	Learning Powers Code of Conduct Positive behaviour management





