



## **Abbeywood First School**

### **Science Subject Rationale**

At Abbeywood First School, the aim of our Science Curriculum is to provide pupils with the opportunity to develop enquiry questions and conduct scientific investigations. We want our pupils to gain confidence in observing, describing, explaining and understanding concepts related to the three different scientific disciplines: biology, chemistry and physics. This comprehends the life processes of organisms, the properties of varied materials and how they can be changed, as well as forces, energy, the composition of the Earth and its planetary properties.

Our science subject curriculum is progressive, inclusive and coherently sequenced in order to establish a solid foundation for all our pupils. It begins with and is driven by subject **knowledge**, which is developed through observing, describing, explaining and understanding scientific concepts, combined with enriching practical investigations which enhances their capacity for scientific reasoning, knowledge and language. This exposure to a hands-on experience is essential because our pupils learn by asking questions arising from their natural curiosity and knowledge of the world around them, and it enables them to gain deep knowledge and science skills.

We think of **knowledge in science** as consisting of

- **Substantive knowledge** – foundations of all three scientific disciplines: biology, chemistry and physics.
- **Disciplinary knowledge** – scientific enquiry and investigation.