

# SCIENCE AT PALACE WOOD PRIMARY

## VISION

At Palace Wood we aim to inspire curiosity, compassion, challenge, and courage in young learners, guiding them to explore, understand, and care for the world around them. Our science curriculum empowers students to develop a deep understanding of key scientific concepts, while fostering critical thinking, creativity, and a sense of responsibility. Throughout their journey, they will experience hands-on inquiry, collaboration, and problem-solving, learning how to apply scientific knowledge to real-world situations. By the time they leave our school, they will have developed essential scientific knowledge, skills, and a lifelong passion for discovery, ready to approach future challenges with empathy, resilience, and confidence.

## WORKING SCIENTIFICALLY

The heart of our Science curriculum at Palace Wood is working scientifically. We aim to equip all children with the skills they need to think like a scientist. The children will learn how to transfer these skills into other curriculum areas and the importance of them in life beyond school. The children learn to:

- Ask questions
- Make predictions
  - Set up tests
- Observe and measure
  - Record data
- Interpret and communicate results
  - Evaluate

## SCIENCE LESSONS

Science lessons are vibrant and inclusive where practical, hands-on activities are at the heart of learning. Through a wide range of scientific enquiries — including observing over time, identifying and classifying, pattern seeking, researching using secondary sources, and comparative and fair testing — we nurture children's natural curiosity and develop their ability to think, question, and investigate. By engaging in hands-on exploration and real-world problem-solving, our pupils grow as confident, critical thinkers who understand that science is a dynamic and collaborative process of discovery.

## BIOLOGY

In our primary biology units, we aim to spark curiosity about living things and nurture a deep respect for the natural world. Through hands-on investigations and real-life contexts, children explore life processes, habitats, human biology, plants, and animals. Our vision is to develop confident young biologists who can observe closely, ask thoughtful questions, and make meaningful connections between themselves and the world around them. We believe that understanding biology not only supports learning across science and other subjects, but also fosters responsibility, empathy, and awareness of the impact we have on our environment and future.

## CHEMISTRY

Our aim through the chemistry units at Palace Wood is to inspire curiosity about the materials that make up our world and how they change. Through practical investigations children learn to observe, compare, classify, and test materials, developing a strong foundation in key concepts such as states of matter, mixtures, reactions, and the properties and uses of everyday substances. We aim to foster inquisitive, analytical thinkers who can apply their understanding of chemistry not only in science but across subjects — and in understanding real-world challenges like sustainability, recycling, and innovation.

## PHYSICS

Our physics units at Palace Wood aim to ignite a sense of wonder about the physical world and how it works. Through engaging, practical learning experiences, children explore key concepts such as forces, electricity, sound, light, and movement. We aim to develop confident learners who think critically, ask meaningful questions, and apply their understanding to real-life situations. By nurturing skills in observation, measurement, and problem-solving, our physics units help pupils make links across science, technology, engineering, and maths — preparing them to become inquisitive thinkers in a world shaped by physical science