



Science at Newton Village Academy



Vision



For children –

- To develop scientific knowledge and conceptual understanding through the disciplines of biology, chemistry and physics.
- To be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.
- To use a range of methods to communicate scientific information and present it in a systematic, scientific manner, including ICT, diagrams, graphs and charts.
- To develop a respect for the material and equipment they handle regarding their own, and other children's safety.
- To develop an enthusiasm and enjoyment of scientific learning and discovery.



Curriculum Approach

- Unit plans outline small steps progression.
- Ensure that key concepts are fully grasped before moving on.
- Opportunities for developing enquiry skills are embedded throughout.
- Opportunities to think like a scientist and experience hands-on, practical scientific investigations.
- Encourage children to explain their thinking, whether verbally or in written form.



Teaching & Learning Approach

Retrieval Practice activity at the start of each lesson to recap prior Knowledge.

- Explicit teaching of scientific vocabulary, creating opportunities for repeated engagement and use over time.
- Discussions with children to assess scientific understanding, use of scientific vocabulary and to identify and address misconceptions.



Assessment & Feedback

- End of unit summative assessments are carried out at the end of each unit to track attainment.
- Questioning children during lessons to assess understanding and highlight misconceptions.
- The marking policy encourages 'live marking' to address misconceptions at the point of learning.
- Pupil interviews are carried out as part of the monitoring process to assess the retention of learning.
- Formative assessment to be used to support learning and responsive teaching.