

What are our non-negotiables for Science at Hambrook?

When children leave Hambrook they will have:

- The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings.
- Confidence and competence in the full range of practical skills, taking the initiative in, for example, planning and carrying out scientific investigations.
- Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings.
- High levels of originality, imagination or innovation in the application of skills.
- The ability to undertake practical work in a variety of contexts, including fieldwork.
- A passion for science and its application in past, present and future technologies.

How will we provide this?

Coverage
<ul style="list-style-type: none"> • With science as a core subject, each unit must be covered during the academic year, either as a block or across the term each week. • Teachers will use formative assessment to ensure that learning from previous year groups is revised and consolidated before introducing new terms • Units and objectives will be divided between year groups to ensure that every objective is covered. • Encourage links across the curriculum, for example linking science to learning in numeracy, computing, literacy and so on, demonstrates to pupils how concepts can be used outside the classroom. • Children will be exposed to and taught the scientific language specific to the unit
Assessment
<ul style="list-style-type: none"> • Begin a unit with a pre-unit assessment and end with a final assessment of the progression that each pupil has made. Assessment will take the form of a 'Big Question'. • Complete assessment on a termly basis or after each science unit. • Summative assessment will take place at the end of the year using Target Tracker
Evidence
<ul style="list-style-type: none"> • Clear evidence of termly investigations recorded using school Science Investigation template. • Use of 'Big Question' to show progress in learning and understanding from the start of the unit to the end • All children are to have a Key Stage science book to record investigations, assessments and some knowledge based learning • Books should have a good standard of presentation in line with the schools' presentation and marking policy
Engagement/Lesson format
<ul style="list-style-type: none"> • Wherever possible, Science lessons should be hands-on and practical where children are engaged, challenged and encouraged to explore. • Teachers will use a variety of open questions to stimulate thinking and encourage discussion. • Teachers will differentiate activities through using deeper thinking questions. Pupils need to explore open ended tasks and record experiments whilst maintaining high quality presentation of their work. • Teachers will ensure that vocabulary is displayed and their definitions explained. Pupils will be encouraged to talk. They should be tasked with using the new language learnt and assist pupils into making their ideas clear and concise.