

Curriculum Overview: Science

INTENT

What are we trying to achieve?

- •At Avonwood, science teaching at Avonwood Primary School aims to teach a set of core ideas that will enable all students to experience a personal sense of awe and wonder when describing and explaining the world around them.
- •At Avonwood, we aim to give children an understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of Science, today and for the future.

IMPLEMENT
How do we organise

- •The Avonwood science curriculum is adapted from the United Learning curriculum and is aligned to the National Curriculum 2014 and Programmes of Study for KS1 and KS2 and 'Understanding of the World' in the Early Years Foundation Stage.
- •All lesson plans are based on Rosenshine principles and reflect best practice. Teachers use assessment for learning to tailor lessons around our children and help plan for subsequent sequences of lessons.
- •All units include:
- •A practical pre unit formative assessment;
- A knowledge organiser which outlines knowledge (including vocabulary) all children must master;
- •A cycle of lessons for each subject, which carefully plans for progression and depth;
- Continuous formative assessment to identify misconceptions and fill gaps in knowledge;
- •Opportunities to apply ideas and knowledge for example, trips and visits/ virtual talks from experts;

IMPACT
How do we judge our success?

- •We measure the impact of our curriculum through the following methods:
- •Tracking of knowledge in science exercise books and in floor books;
- •Tracking of knowledge in pre and post learning guizzes;
- •Challenge questions for pupils to apply their learning in a philosophical/open manner through "Odd one out", "What if?", "PMI statements" or concept cartoons;
- A reflection on standards achieved against the planned outcomes (KPI's) and moderated with ASE PLAN documents.

Signature Pedagogies

Retrieval through pre and post learning quizzes

Knowledge organisers to aid retrieval

Explicit teaching of vocabulary

Modelling of working scientifically

Probing questions

Open ended questions for children to demonstrate greater understanding

Small steps which build on prior knowledge

Collaborative discussion and group work

