



Subject on a Page for Science



Why you teach it - your purpose of study

At Audlem, we aim to teach children the knowledge, methods, processes and uses of science. They are encouraged to understand how science can be used to explain what is happening, make predictions and form conclusions. Our science curriculum planning is based on the National Curriculum 2014 where the key foundational knowledge and concepts are built on. Science has changed our lives and we place an importance on children learning and developing a curiosity about the world around them. We want them to understand that science is the study of the world around us. We want to encourage them to become detectives who explore science in an exciting way. We teach children to be open minded and enquiring thinkers who understand cause and effect. We want them to understand how to observe, describe and experiment. We encourage first hand experiences through planning STEM based experiments where possible and bringing in specialists for in-school workshops. All of these will bring the children as close as possible to understanding science. We teach that science is an integral part of our world and has links to many other subject areas including maths, English and computing.

INTENT

What you teach - your programme(s) of study

We believe that high-quality, hand on science lessons will inspire children to think innovatively and develop their natural curiosity. Our science curriculum encourages children to develop a coherent knowledge and understanding of the world around them. Pupils should be clear what the intended outcomes are and have a means to measure their own work against this. In science, children are expected to be reflective about their thinking. This should be made meaningful and as real as possible throughout the process, with evidence of age-related verbal and written reflection.

Science at Audlem is developed to equip pupils to think critically and ask questions. They will learn about specific people and events in science that have changed the way we live, as well as developing a chronology of Britain's science both historically and recent.

IMPLEMENTATION

How you teach it - your delivery of the above

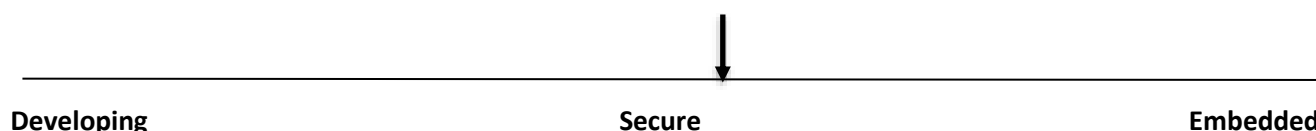
Teachers plan science carefully using the objectives that form our medium-term plans, which are then transferred onto our curriculum map. Teachers are able to see what skills and knowledge have been taught previously. From this they are able to create a glossary mat which outlines knowledge and skills (including vocabulary) that children should master. Teachers are then able to design a cycle of lessons for each subject, which plans for progression and depth. Teachers also plan lessons that can be carried out collaboratively with other year groups. They will create a way for science to be displayed or shared to celebrate the pupil's work. Lessons are also taught using objectives from the Cornerstones curriculum. These lessons are specifically designed to encourage the development and understanding of working scientifically.

IMPACT

So what - your evaluations of the above

Our science curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through: a reflection on standards achieved against the planned outcomes; a celebration of learning for each term which demonstrates progression across the school; assessment of the skills and knowledge with our progressive statements and pupil discussions about their learning.

On the scale below rate where you believe this subject currently stands in terms of your overall curriculum offer:



Previous Improvement Actions and Impact	Current Improvement Actions	Future Improvement Actions
STEM week – Maths, D&T, Science, and Computing. Due to COVID lock down restrictions, this was not as successful as previous STEM weeks.	Further establish and maintain regular and purposeful use of the allotment beds, to grow food linked	Further embed subject knowledge through the teaching of science to a variety of year

• Science lead skills were developed through the teaching of science to year 6. • Pupil voice provided a clear insight into children's perceptions and experiences of how science is taught and received at Audlem school.	to topics and for use in the school kitchen. • Continue to embed differentiation and use of next steps in marking. • Continue to include increased of evidence of SC1 across the whole school through the use of Corner-stones investigations. • Core skills are to be used effectively across the curriculum. Skills taught in the lessons will be evident in the learning objectives displayed in class and on planning. This will be linked to clear success criteria which are shared with the children. Monitored through learning walks, lesson observations and termly planning scrutiny. Linked to book scrutiny sampling / APP grids • Further develop cross curricular links, particularly with Maths, English and Computing through Science. Integrating writing opportunities and ICT to use in science subject lessons. This should be evident in lesson plans and topic books. This will be monitored through book scrutiny on a termly basis. • Continue to embed the use of science working walls and glossary mats to enhance children's understanding of specific scientific vocabulary. • Continue to monitor the effective use of Bath Spa focused assessments as a tool for summative and formative assessments.	groups. • Utilise knowledge and resources from Brine MAT colleagues. • Utilise the outdoor space at the Turnpike field in Audlem Village. Liaise with Anthony Hadfield re; Forest Schools. • Knowledge mats to continue to be stuck into books and displayed on working walls for regular referral during teaching to promote 'sticky knowledge'.
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