



The Costessey Curriculum

Intent

At Costessey Primary School we instil ambition for all through **discovery**, **exploration** and **creativity**. We seek to build the academic, social, emotional and economic skills to prepare children to take up their full place in our ever-changing world.

We continually strive to bring **real-life experiences** and opportunities into the curriculum and immerse the children within their current theme and make learning relevant.

Our Knowledge, Skills and Understanding documents are designed to ensure that the skills required of our pupils build year upon year, allowing them to leave KS2 already familiar with the reach of individual subjects.

Through our science work at Costessey Primary School, we intend our pupils to develop their knowledge of scientific concepts, the corresponding vocabulary and how this relates to the world around them. By introducing them to the necessity of working scientifically and applying these principles across different strands of science, we want our children to leave us with both the skills and knowledge that will see them ready to take on the challenge of science at secondary level.



Implementation

The academic year is divided into the history-heavy 'Discover' autumn term, the geography driven 'Explore' spring and the arts-based 'Create' term. Science is taught as a discrete lesson each week throughout the school year. Science units are not linked to the Discover- Explore – Create themes, although links are made where these are obvious.

Medium Term Plans are written by the Subject Lead to ensure the necessary coverage and progression as set out in the Knowledge, Skills and Understanding documents. Year group teams are therefore freed to invest their time in the creation of quality lesson resources tailored to their cohort and incorporating a level of challenge to stretch the more able.

The emphasis on vocabulary will be clear from Medium Term Plans and through the use of Knowledge Organisers for each term. Class teachers all have dice available with pockets for scientific vocabulary to enable the practice of these key terms outside the main Science lesson and throughout the week.

In Science, we aim to grow ambition through detailing the possible careers that might stem from the science unit currently being studied. Lessons will ensure children are exposed to the diverse group of individuals who have made major contributions within the realm of science. The commemoration of milestone scientific discoveries and events will also feature as part of our Collective Worship.

The daily visual timetable in all classes from Y1 to Y6 informs pupils of what subjects will be studied when. A matching image plus explanation of the activity context in books allows pupils to see at a glance the development of work in each curriculum area. Science work is kept together in its own book in all year groups. In Year 1, we also use large floor books in science to capture the children's questions and learning over time. This allows classes to revisit key learning and see how thinking has moved on.

All sessions have a learning challenge question, which children are encouraged to revisit and self-assess against at the conclusion of the session.

Each new unit in science begins with a short quiz to check prior learning and knowledge of the upcoming unit. These quizzes support teachers to address misconceptions and to ensure planning is adapted to fill any missing gaps in knowledge. Sessions then begin with a retrieval task which revisits learning from previous lessons and previous years and is recorded in books. For discussion or practical based sessions, the record in books may be

photographic, showing the practical activity in progress or an image of the class flipchart / screen to which ideas have been contributed. In this way, pupils will be reminded of the work they have undertaken and be able to talk their way through their complete learning journey.

AFL and the regular revision of activities and resources is an integral part of our teaching. Sticky Knowledge Quizzes (with the key content identified by Subject Leads) are conducted every four weeks. Where pupils show that key concepts are not yet sticking, further activities will be provided to enable them to make the necessary progress.

Working scientifically forms a key part of each science unit. Teachers are provided with an overview of the key scientific processes expected of children in that year group. These cover observations over time; comparative and fair testing; identifying and classifying; pattern seeking and using secondary sources (research). Children have a working scientifically learning challenge question, which they are encouraged to revisit and self-assess against at the conclusion of the session.

Teachers will alert subject leaders and the senior leadership to any areas of concern as they arise. The subject lead will conduct regular book looks in order to be able to provide swift support where necessary, assessing the appropriate level of challenge and adjusting as necessary. Teachers and subject leaders will work together to identify those pupils who would benefit from an additional level of challenge.

Medium Term Plans will be reviewed at the end of each term with a view to making any adjustments as necessary before the next cycle. Even where all sessions have been deemed successful, subject leaders will still review plans in the light of the next cohort, taking into account any specific needs or challenges presented by that particular year group.

Teachers will have the same expectation as to the quality of written work in science books as they do in English books.

'Subject Evaluation' days will take place over the year, involving the Subject Leader, member(s) of the Senior Leadership team and including pupil interviews plus visits to lessons where possible.

Impact

As our curriculum is a progression model, children who are succeeding with the challenges provided in each year group can be deemed to have made progress from the previous year.

Teachers will be aware of the learning journeys that their pupils are on and be able to provide examples of where they have adapted or deviated from plans to meet needs, evidencing that adaptation with work in books.

Work in books will show that children take pride in their work. Activities will be able to be tracked through a coherent sequence of lessons and misconceptions will be addressed with further activities. Subject specific vocabulary will be evident in pupil work.

Where children find it difficult to record their thoughts in written format, alternative recording methods (e.g. video / voice recordings on Seesaw; use of an adult as a scribe) will capture their progress in a subject.

At the end of each unit, children will complete a quiz that reviews their learning. Teachers will use this quiz in order to identify pupils who would benefit from an additional challenge in future learning as well as those who might require further support.

Pupil voice interviews will reveal children who are able to talk confidently about what they have learned. They will be able to talk about the specific features of different subjects and demonstrate an understanding of how what they are studying now builds upon what they have studied previously, as well as where their studies will take them next.

Children will be able to explain how they receive feedback from their teachers and how they know what it is they need to work on next.

Pupil work on display in classrooms and corridors will celebrate pupil success and showcase the range of opportunities that Costessey Primary School provides.