

Intent

At Trinity CE Primary Academy, it is our vision to distil a lifelong love of science within our pupils. Through effective teaching, children will develop their disciplinary and substantive knowledge as well as science capital with a view to having a love and curiosity for discovering how the world around us works. We intend to provide children a broad and balanced science curriculum that is inclusive for all.

Impact

We use a variety of strategies to evaluate the knowledge, skills and understanding that our children have gained in each unit:

- children are able to confidently use scientific vocabulary,
- regular feedback and marking.
- regular flash quizzes with lessons to check retention,
- end of unit knowledge assessments,
- use of intervention packs to address misconceptions and close gaps,
- attainment of disadvantaged learners increases,
- CPD to ensure that teacher pedagogy and assessment is secure.

The Science Leader will carry out the following monitoring during the year to inform future planning and next steps:

- learning walks,
- book looks,
- pupil voice,
- staff questionnaires.

Implementation

At Trinity, we implement a curriculum that is progressive throughout the school. Using 'Plymouth Science' our topics are organised into year groups and designed around the statutory requirements for Primary Science and gives full coverage of the National Curriculum. Teachers are familiar with previous and subsequent year groups' content in order to link learning and build on previous knowledge. Science is taught discretely once per week by the class teacher. At the start of each, unit teachers take time to elicit children's current understanding, this highlights: knowledge, misconceptions and identifies areas for the teachers to focus on. Each lesson includes a working scientifically and scientific enquiry objective. Children will create their own knowledge organisers throughout the unit to record 'sticky knowledge'. Teaching is differentiated either by resource or support. More able learners should be challenged to make connections within science and to apply their knowledge to real world situations. Outside visitors and trips should be utilised where possible. Children rate their vocabulary knowledge at the end of a topic. Regular knowledge checks allow the teacher to clearly see and address any misconceptions. Every year, the whole school will participate in science week and will partake in a workshop linked to the theme as well as have the opportunity to learn about scientists. Not only this but KS2 will have the opportunity to attend a careers fair to learn more about careers linked to STEM. By the end of the children's primary education they will be able to:

- plan and carry out scientific investigations both individually and as a group,
- make predictions backed up by their own scientific understanding,
- use a wide range of equipment to make accurate measurements,
- use their observations and knowledge to answer scientific questions,
- develop a respect for the materials and equipment they handle with regard to their own and other children's safety,
- use a range of methods to communicate scientific information and present it in a systematic, scientific manner, including ICT, diagrams, graphs and charts,
- understand different career paths that science can lead them to.