

'Thanks for the STEMories!'

Crabtree's Science, Technology, Engineering and Maths in focus April 2023 Edition 1

Here at Crabtree Farm, we pride ourselves on providing our children with opportunities to develop and extend their experiences in **STEM** subjects. Not only do we teach the science curriculum given in the National Curriculum, we also take time to prepare them for applying their skills in science in several different areas. Enjoy reading all about the fun and exciting **STEM** learning lessons your children will have this year.

STEM subjects are taught in several lessons:

- Science
- Design and Technology
- Forest Schools
- Food for Life
- Eco Warrior Ambassadors
- Geography
- Computing



You can read more about our curriculum areas on our website! Take a look at the year group overviews or subject pages.

Forest Schools – An exciting adventure for selected children one afternoon per week. Children can access outdoor learning to explore plant life-cycles, animal habitats and problem-solving skills using their science knowledge. We also get the chance to use our maths skills and design skills to build actual items we can use: bow and arrow; dens and catapults.

Science – Mrs Wilson, in year 6, is our leader for science. It is taught directly for 2 hours per week in our school. Lessons involve learning how to be good scientists by building our 'Working scientifically' skills. Our children learn how to observe, measure, plan, predict and ask questions. A firm favourite for our children is to set up tests to compare how things work in the world around us.

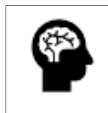
We use Developing Experts to teach our science curriculum.

Design Technology - In these lessons, children can put their science & maths skills and knowledge to the test.

Every year group has 3 projects to complete. These projects involve making products for a given person or group, and always with a purpose in mind. Many of them involve textiles, construction, electronics and food technology.

In fact, our children are provided with the opportunity to prepare and eat meals with produce grown in our own school.

Miss Staniland is our school leader for DT.



Exciting news! All children will be given log in details for Developing Experts soon!

Eco Warriors – Each class has an ambassador who meets with Miss Martyn (EYFS) to help preserve our school environment. This often includes litter picking, recycling and learning about reducing our carbon emissions as a school. We are addressing concerns raised in COP27.



Food for life – Here at Crabtree we are very fortunate to have every child experience growing and cooking with produce that is grown on our school grounds. We have our own orchard and poly tunnel which is used all year round. From apples to pumpkins we have been growing and selling produce that is organic and helps to reduce carbon emissions. Growing locally helps to reduce the distance food produce travels before it gets to our plates. Our school could always do with your support to help grow our produce. If you want to know more, get in touch with Mrs Barker in Early Years. Learning to grow and maintain your own produce is a key part of science knowledge. Biology (botany) is the biggest area of science studied in primary schools.

Geography – Miss Prince is our school leader for geography.

Geography lessons are linked to science when we learn about the materials the earth is made of (properties of materials; earth and space, states of matter and weather). Lots of learning in geography involves fieldwork skills, where we learn to explore our local areas – seeing what is around us is essential to developing our observation skills as scientists and geographers. Help your child to notice things around them and ask questions about why it is there and how it works.

Computing – A firm favourite with our children. Our computing lessons link to many other aspects of the curriculum, whether that be representing data (linking to maths and science), creating 3D landscapes (linking to geography and art), making movies (linking to performing arts and English) or designing and creating computer games (linking to DT), the list goes on. Teaching children how to become problem-solvers, and confident and responsible with all aspects of technology is vital to ensure we have a future world full of scientists, engineers, geographers, mathematicians and jobs that don't even exist yet! Miss Provines is our school leader for computing and can be found in year 5.

PE – In our PE lessons, children learn to explore their biology by understanding their muscle systems, skeletal systems and even the circulation systems. PE is taught for 2 sessions per week as well as completing the mile. Science is a key element of PE! Balance, agility, flexibility, stamina and power are essential areas of knowledge which must be understood to make the most of our PE skills. Mrs Marshall and Mr Kiggins are available to talk to you about science in our PE lessons.

Maths – Our children can access maths lessons via Mathletics, TT Rockstars and Education City online. See their diaries or teachers for log in details. Maths skills help our children to work scientifically like scientists, through measuring, predicting and data collection. If you want to know more about our maths curriculum, Mr White and Miss Provines can help.

Have you got skills to share?

Thinking about your own skills – from work or hobbies – do you have specialist knowledge about STEM subjects? Would you be willing to share your knowledge and skills with our staff and children? We would love to hear from you and get you involved in our school's science community!

See Mrs Wilson in Year 6