



Cwmaber Junior School
Ysgol Plant Iau Cwmaber

Ysgol Fabanod Cwmaber
Infants School

Vision

Through positive learning experiences, our vision is to create learners who are **ambitious**, **capable** and able to implement Science and Technology in their everyday lives. We want them to be **curious** and understand the importance of Science and Technology in our modern world. The knowledge and deep understanding that learners will gain through experiencing **what matters** in Science and Technology, will support them to live independently and fulfil their lives whilst contributing to society and culture in a variety of ways.

We intend for our learners at Cwmaber to become more resilient and purposeful across all areas of Learning and Experience. As a school, we will draw on the disciplines of **biology**, **chemistry**, **computer science**, **design and technology** and **physics** to enhance our learners' knowledge and understanding of **Wales and the wider world**.

Local, National and Global Contexts

Learners have the opportunity to develop an awareness of:-

- Weather and climate change
- Pollution
- Pandemic: health issues, medicine
- Science and Technology in the local and national news
- Local wildlife/animals/biodiversity
- Ever-changing global technology

Twinkl Plan It

Plan It allows the learners to create **quality scientific work** and shows **progression** in skills. Learners have the opportunity to **explore** and learn more about the world around them.



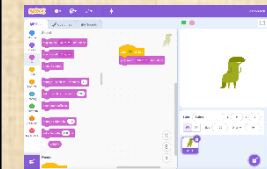
ICT and the DCF

Each term we focus on an area of ICT, teaching discretely as well as through themes. The ICT/DCF skill is identified through short term planning and is self and teacher assessed throughout the term. The DCF skills are mapped out per year group, across other AOEs

Principles of Progression

Following Professional Learning by Science and Technology leads, we have decided to follow a structure of skills to ensure progression throughout the Science and Technology Area of Learning and Experience. We follow EAS guidance, BEST Research and the Framework for a Future Primary Science and Curriculum. Here at Cwmaber, we are aiming to ensure that our children are knowledgeable about these areas, ensuring progression and consistency throughout their school years.

- Increasing effectiveness as a learner.
- Increasing breadth and depth of knowledge.
- Deepening understanding of the ideas and disciplines within Areas.
- Refinement and growing sophistication in the use and application of skills.
- Making connections and transferring learning into new contexts.



Coding

Purple Mash and Scratch programs and the **PRIMM** approach were used to develop creativity when coding.

Predict... what this code will do

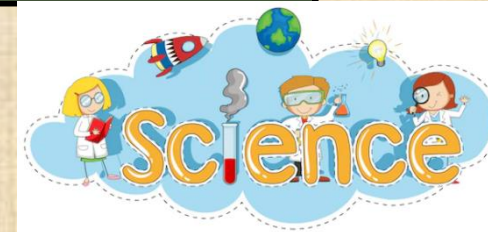
Run... the code to check your prediction

Investigate... trace through the code to see if you were correct

Modify... the code to add detail, change actions/outcome

Make... a new program that uses the same ideas in a different way.

Science and Technology



Branching Out

Each term in Science and Technology, the learners complete Branching Out 'leaf' activities, that lead to a Flourishing Finale activity/piece of work.

Rights, Respecting Schools

Article 24: Right to food and water: knowing where food comes from, life cycles, water cycles, growing food.
Article 14 - Freedom to the right of thought: e-safety.
Article 28 - The right to an education, the right to come to school - Science and Technology, access to the curriculum.
Article 12 - respect the views for the child, ethical consideration, knowing what's right and wrong.

The Four Purposes

At the heart of our Science and Technology teaching lie the Four Purposes.

Everything that we do is to enable these Four Purposes to be met:

- ambitious, capable learners, ready to learn throughout their lives.
- enterprising, creative contributors, ready to play a full part in life and work.
- ethical, informed citizens of Wales and the world.
- healthy, confident individuals, ready to lead fulfilling lives as valued members of society.



School Trips / Visitors / Workshops

Royal Mint
Lego workshops
Welsh Water- coding
Science Week
Technique
Aerospace Bristol
Scratch Workshops
Bristol Aquarium
Coding Cafe

Science and Technology Related Topics

Off We Go...
Changes
Blue Planet
Crazy Climates
Around the World

