

Science at Tregoze Primary School

At Tregoze Primary School we follow the 'Mastery Learning Model' when we teach Science. This involves spending greater time securing the National Curriculum objectives. Previously, when children were moved through the different Science skills too quickly, it resulted in them having gaps in their knowledge because the concept they had just learnt was either too big or learnt too quickly. As a primary school, it is our duty to ensure that children have an absolutely solid, concrete understanding of Science skills as well as encouraging them to embrace challenge.

Our intention is take learning at a measured pace. This will better ensure no child is left behind as well as providing deeper and richer experiences for children who are grasping ideas quickly. The children are only taught the content from their year group and not going beyond this. Simply going beyond the requirements of their age group does not guarantee they have fully understood something – just that they have heard it.

In essence, this means working towards:

- **Teach less, learn more** – focussed content, evidencing learning and progress;
- **No child being left behind** – the majority of children are enabled to keep up every day;
- **Space and time** – to experience and apply, with all children entitled to additional support to ensure they do not fall behind or to be challenged in their learning and go deeper with their understanding;
- **Understanding real life applications** – wherever possible for learning to be relevant and not abstract, to teach with a clear purpose.

We aim for all pupils to:

- develop **scientific knowledge and understanding** through biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

(See Science Policy for more detail on these aims)

All this means is that there may be a change in the way we have historically taught and assessed pupils. We will be doing more of this:

- Teaching all pupils in class, together, most of the time
- Verbal feedback during lessons and more ticking of correct concepts
- Spending longer on one idea
- Giving pupils who need it additional support over shorter more intense timescales – ideally same/next day - to prevent gaps in learning occurring
- Giving pupils who need it additional support to challenge them and apply their thinking
- Regular assessments

And less of this:

- Formal marking with lots of feedback and 'next steps'
- Covering lots of ideas in one week or one lesson
- Formal, long term interventions to boost pupils out of class
- Separating in to ability groups
- Formal testing of pupils termly