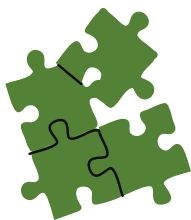


Science at Thomas Johnson Lower School



TJLS Curriculum Drivers

Dream

Children will experience and observe phenomena. Children will be encouraged to recognise patterns and ask their own questions. They will work scientifically when conducting experiments to help them understand more about a process or observation. The more they learn, the more questions they will have!

Discover

Children will be taught about scientific discoveries in the past. They will consider how these discoveries have changed the world today. Learning about significant STEM figures will enthuse the children.

Technical vocabulary will be shared from a young age. Children will be expected to know and use the language accurately and work like a scientist.

Learning will be fun. There will be a lot of practical, hands-on learning that will involve the children actively learning and even getting messy! They will be stimulated by their discoveries and the implications of their results.

Flourish

Being able to formulate a hypothesis about a concept and support it with scientific understanding is important. Children will be required and supported in articulating their thoughts and reasoning with clarity and precision.

Knowledge will be revisited and tested regularly. Children need to know technical scientific knowledge in order to understand and process some of the more abstract concepts. Learning from the previous unit/term will be referenced so that children can build on existing understanding.



Sequencing of Content

Units are sequenced so that knowledge and understanding builds on previous units.

Prior learning is referenced at the start of new units so that foundations of learning are used.

Key concepts are interleaved throughout the curriculum so they are regularly revisited.



Deepening of Content

Concepts are deepened over time as they are referred to throughout learning journeys.

Links are made throughout the year but also between year groups.

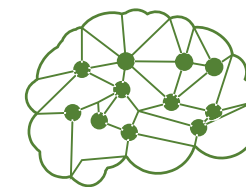
Working scientifically is focused on every year with regular experiments and investigations to test a hypothesis.



Big Ideas

We ensure children know and understand 'Big Ideas' in chemistry, physics, biology and Earth science, e.g.

- Physics - the universe follows unbreakable rules that are all about forces, energy and matter.
- Chemistry - matter can change if the arrangement of these building blocks changes.



Retrieval Practice

Children take part in regular mini-quizzes and retrieval activities to strengthen their memory.

Learning journeys dovetail so learning can be retrieved and applied.

Remembering information and knowledge is celebrated as part of the TJLS culture.