Subject Overview – 2022/23 – Layton Primary School

At Layton, we believe that learning takes place over time, resulting in a change in long term memory from Unconsciously incompetent to Unconsciously competent, and involves forgetting, revising, consolidating, extending and applying knowledge in a variety of contexts. To do this, children need to think deeply and critically about subject matter and engage with difficult concepts. Learning is, and should be, hard.

Impact

Children organise knowledge by concepts and categories.

Child led enquiry through collaboration with peers.

Teachers receive regularly, high-quality CPD.

Teachers and children develop subject-specific vocabulary orally and in writing. Children recording their scientific ideas in practical ways.

Implementation

Children have a deeper understanding of phenomena and concepts.

Children apply scientific knowledge to the local area and real life concepts.

Children can problem-solve and this builds resilience within science and wider curriculum.

Working scientifically, ask and answer open-ended questions with a clear progression of skills of enquiry.

Summative assessments once per half term to assess enquiry skills and knowledge.

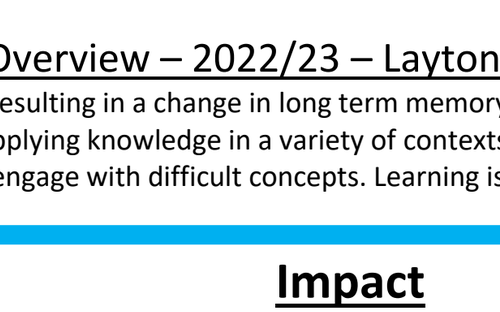
Teachers feel more confident embedding science learning into the long-term memory.

Children are curious and think critically about current global scientific events.

Intent

Science

We aim to ignite children's curiosity about the world around them whilst equipping them with the enquiry skills required to seek solutions to the questions they raise; in order to have a deeper understanding of the world around them. Children believe that they have a future in science and act as leaders, whilst teachers facilitate their learning.



Children can make links to science across a range of subjects.

There is a clear progressio n of scientific enquiry skills throughout their time at Layton.

Children discovering their own outcomes with lots of opportunity to work outdoors.

Children have access to high-quality fiction and non-fiction scientific texts through the science reading spine.

Trips and visits from experts to enhance cultural capital. Spaced learning/retrie val quizzes.

Children can apply data-handling skills within science.

Children want to pursue a career in science.

High quality feedback using process level, task level and self-regulatory questions.

Critical thinking question per week and one overarching half-termly question.

Learning substantive knowledge before disciplinary knowledge.