Swale ACADEMIES TRUST

How we Plan, Teach and Assess

Science

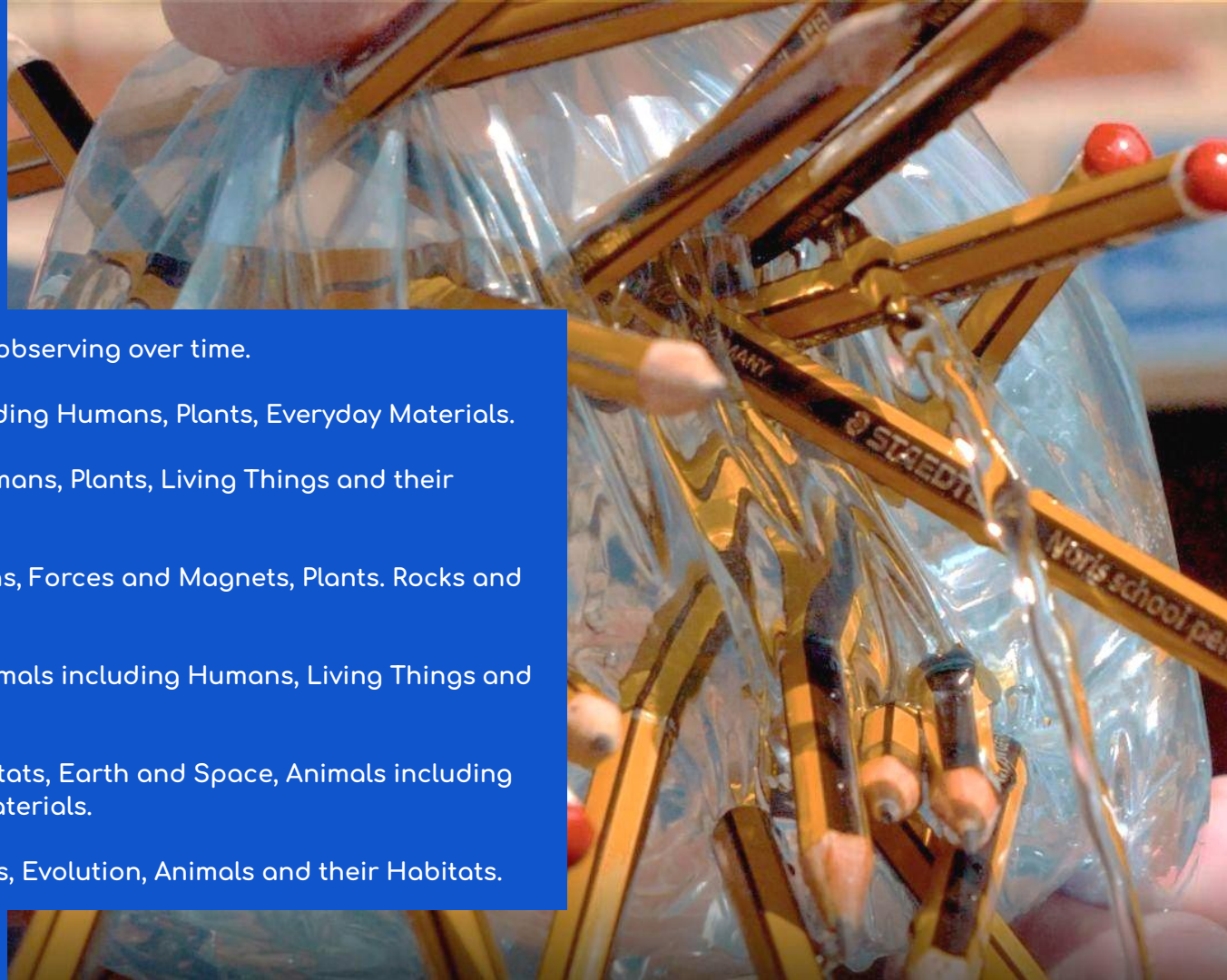
Langney Primary Academy
Active Body, Healthy Mind

Planning Overview

At Langney, Science is taught in a 90 minute afternoon session weekly, in each year group from Year 1 to 6.
EYFS have a focus on understanding the world within their provision. Following the National Curriculum and its End of Year Expectations for each year group, we choose to be guided by the Kent Scheme of Work which has been adapted by a Science specialist. This is used to support the planning and teaching of science.

The scheme contains 28 units. Each unit has been assigned to a particular year group in line with the guidance from the National Curriculum. There is clear progression in the key scientific knowledge and concepts for Years 1 to 6.
Working scientifically and enquiry skills runs through each and every unit of study.
Preceding the scheme, we spend the first term of each year focussing on all the different enquiry types in isolation in Years 1-5.

Science Teaching by Year Group



EYFS: Exploring the Natural World and observing over time.

Year 1: Seasonal Change, Animals including Humans, Plants, Everyday Materials.

Year2: Materials, Animals including Humans, Plants, Living Things and their Habitats.

Year 3 : Light, Animals including Humans, Forces and Magnets, Plants. Rocks and Fossils.

Year 4 : States of Matter, Electricity, Animals including Humans, Living Things and Their Habitats, Sound.

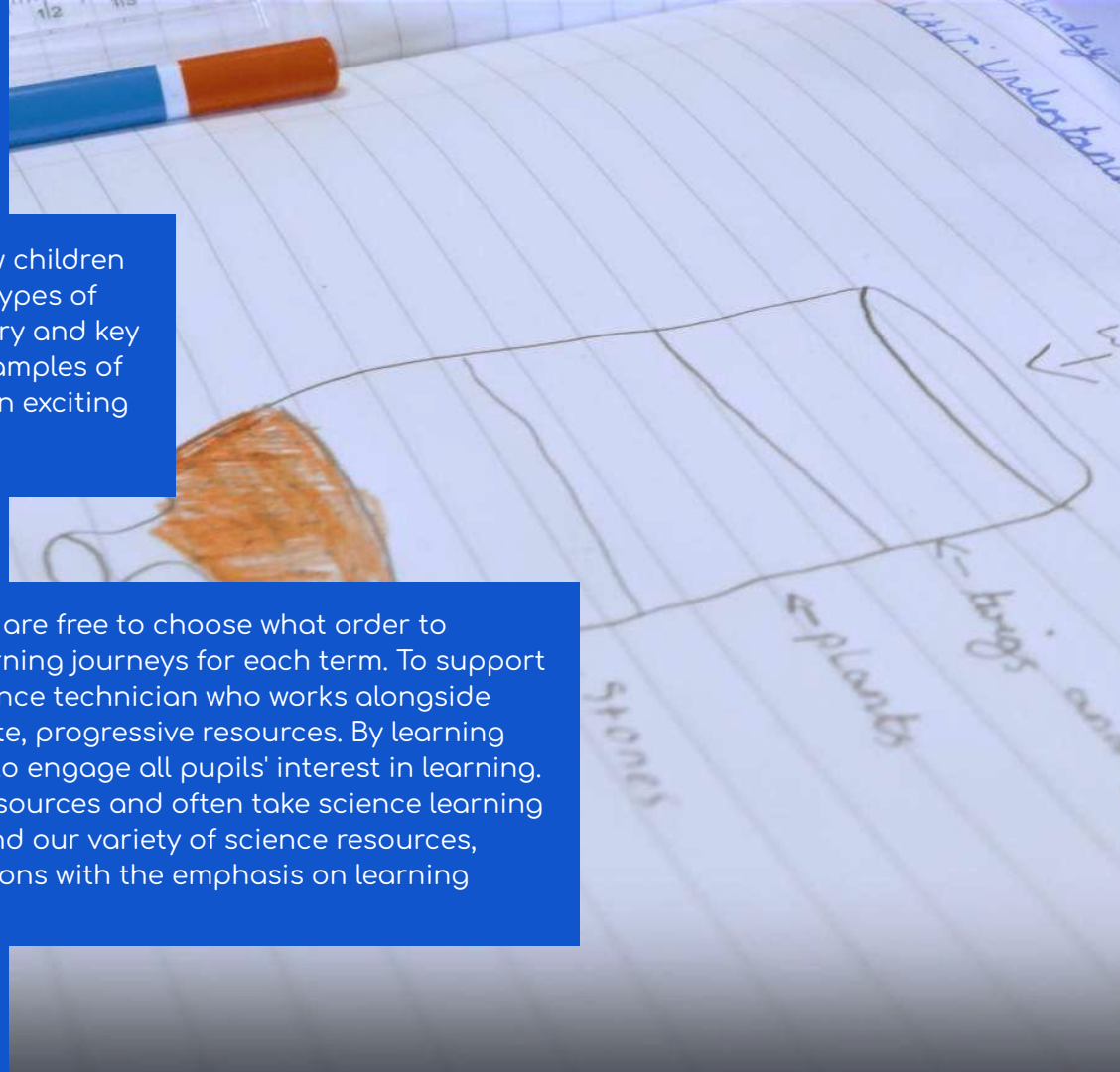
Year 5 : Forces, Animals and Their Habitats, Earth and Space, Animals including Humans, Properties and Changes in Materials.

Year 6: Light, Animals including Humans, Evolution, Animals and their Habitats.

Our Scheme of Work

Our adapted Kent Scheme provides suggestions of how children should work scientifically, learning about the different types of enquiry as well as concise subject knowledge, vocabulary and key scientists related to each unit. It also includes many examples of practical activities to guide and inspire teachers to plan exciting science lessons of the highest standard.

Teachers use the adapted Kent Scheme as a guide and are free to choose what order to complete units in as they compliment and enhance learning journeys for each term. To support our practical, engaging science lessons, we have a Science technician who works alongside subject leaders and teachers to provide age appropriate, progressive resources. By learning through practical and hands-on activities, we are able to engage all pupils' interest in learning. Wherever possible, we use age appropriate scientific resources and often take science learning outside. As a school, we continue to develop and expand our variety of science resources, allowing teachers the opportunity to plan inspiring lessons with the emphasis on learning through hands-on activities and experiences.

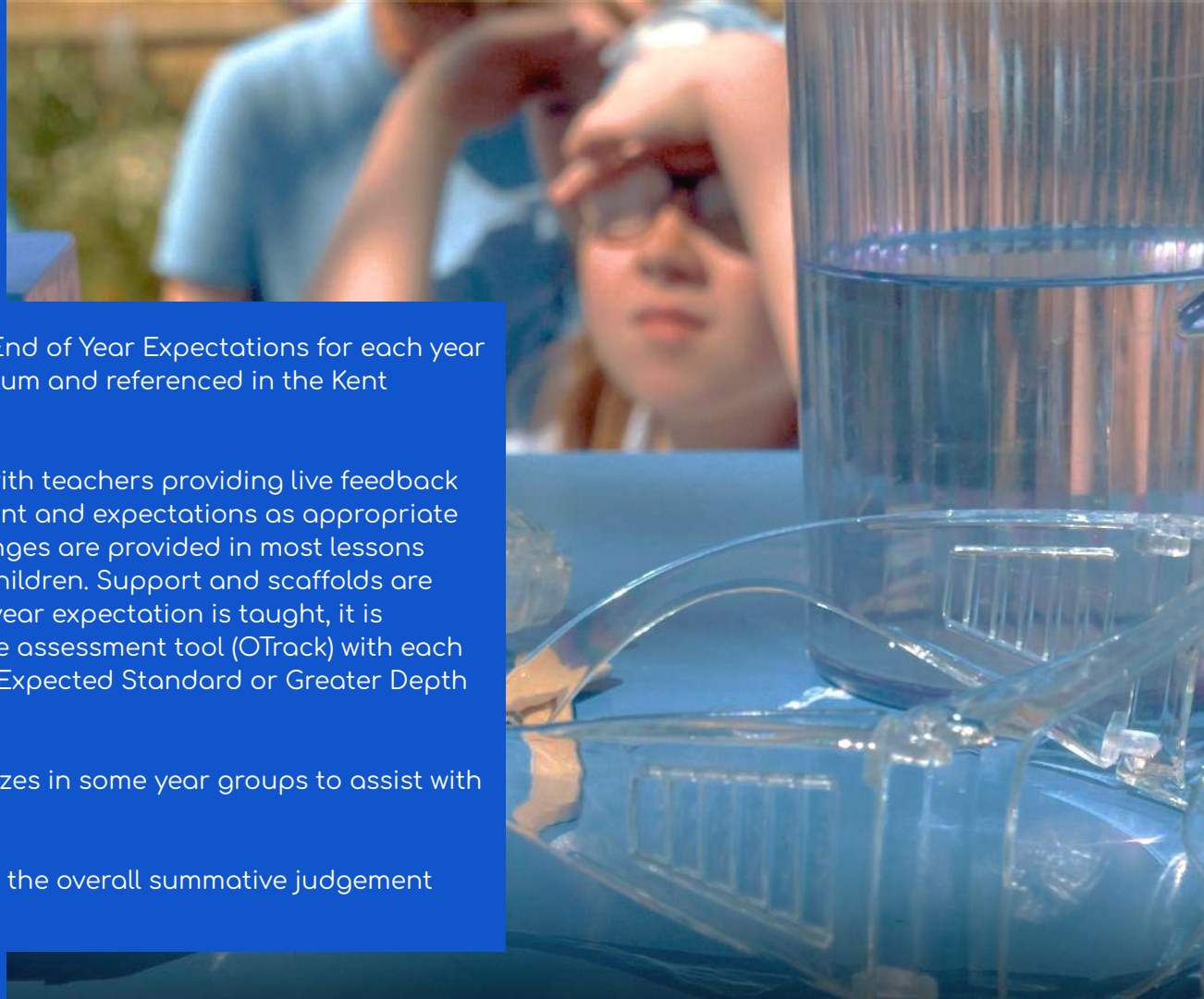


Our Scheme of Work

Each unit is introduced with a key scientist and each lesson is taught using a set of standardised lesson elements including: learning objective, key skills, key vocabulary, preview questions, career opportunities, teaching points, learning activities and a greater depth challenge.

Subject knowledge is revisited with 'Memory Challenge' retrieval slides at the beginning of lessons to refer back to previous lessons and units across Year 1-6. The memory challenge questions increase throughout the school as the children progress.

How is the Subject Assessed?



Science is assessed against the Langney End of Year Expectations for each year group, as outlined in the National Curriculum and referenced in the Kent Scheme of Work.

Assessment is formative and continuous with teachers providing live feedback during lessons and adjusting lesson content and expectations as appropriate for individual needs. Greater depth challenges are provided in most lessons when relevant and meaningful to extend children. Support and scaffolds are also provided as needed. As each end of year expectation is taught, it is assessed formatively on the school's online assessment tool (OTrack) with each child being assessed as Working Towards, Expected Standard or Greater Depth Standard.

At present, we are piloting end of unit quizzes in some year groups to assist with formative assessment judgements.

Formative assessments are used to inform the overall summative judgement mid-year and end of year on OTrack.