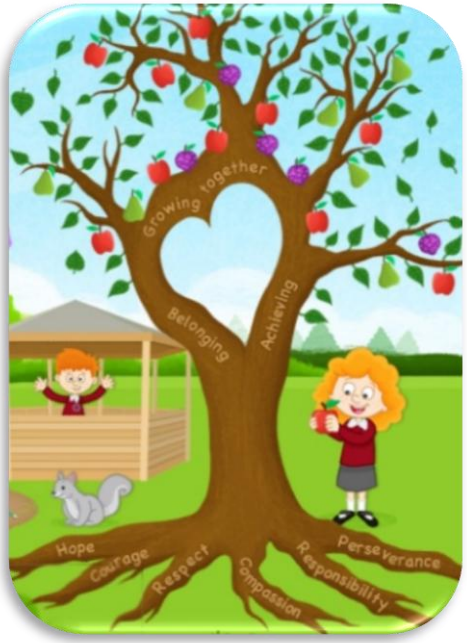
Court de Wyck

Science Culture Document

For Scientists

Our School. Our Family. Our Community.

Growing Together, Belonging and Achieving



I am a scientist…

'My goal is simple. It is complete understanding of the universe, why it is as it is and why it exists at all.'
Stephen Hawking

I am curious. I ask questions to build on my sense of awe of the natural world. I use a wide range of scientific vocabulary accurately and consistently. I systematically gather and use research and evidence to make hypotheses and test them. I gain and share understanding and knowledge with others. I can think like a scientist by using my working scientifically skills. I am a competent scientist who can plan a range of investigations to deepen my understanding. I can reason, predict, think logically and work accurately. I am confident with scientific knowledge and concepts.

Inspire

'Science may set limits to knowledge but should not set limits to imagination.'
Bertrand Russell

At Court de Wyck our science curriculum is aspirational, purposeful and nurtures pupils' natural curiosity to become life-long learners, achieving more than they ever thought possible. We inspire children to become scientists through high quality investigations which allow them to imitate, innovate and apply independent skills. Children are immersed in the scientific world and the development of skills and knowledge are explicitly taught and modelled. Children are inspired through:

- Immersive and interesting activities
- Engaging topics
- First hand experiences building cultural capital
- The use of enquiry skills to become expert investigatos
- Creative teaching
- Active learning
- Multi sensory experiences
- Enticing questioning

Key concept of Science at Court de Wyck

'Science and everyday life cannot and should not be separated.'
Rosalind Franklin

Science at Court de Wyck is organised through a three-year rolling cycle. This **approach** enables children to access all areas of the curriculum during their time at CDW. Children revisit key concepts and enquiry skills throughout the 3-year cycle to support their retaining of information. They move from dependence to independence, with the teacher using live modelling and scaffolding to **develop the ability** in children to **investigate creatively** and **effectively**. Pupils build a positive attitude towards science and an awareness of how fascinating it can be, with teachers ensuring developed confidence in their pupils' scientific knowledge, concepts and skills. Our curriculum gives pupils the opportunity to reason, predict, think logically and to work systematically and accurately. Ensuring pupils understand how to use and apply science across the curriculum and real life.

Teaching and Learning

'Education is the key to unlock the golden door of freedom.'
George Washington Carver

At Court de Wyck, we explicitly teach pupils how to organise and effectively manage their learning independently. Opportunities are consistently given to revisit content and retrieve previous learning. Challenge is crucial to allow learners to develop and progress their knowledge of tasks, strategies and of themselves as learners. Effective explaining and modelling creates self-regulated learners who are aware of their strengths and weaknesses, and can motivate themselves to engage, improve and learn.

- Scaffolding with live modelling
- Flexible grouping and adaptive teaching
- Culture of high expectations for all learners
- Building on prior knowledge - revisit and revise
- Language development– metacognitive talk
- Growth mindset strategies modelled and taught.
- Worked examples.
- Explicit instruction
- Misconceptions addressed.
- Walkthrus
- Every teacher is a teacher of SEND.