



SCIENCE POLICY

Autumn 2024

AIMS	<p>At Christ the King Primary School we aim to provide a quality science education for the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. By developing children's ideas and investigative ways of working, we enable them to ask and answer questions, in order to make sense of the world in which they live.</p> <p>We follow the national curriculum which aims to:</p> <ul style="list-style-type: none">• develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. (sequence of knowledge and concepts with associated technical vocabulary)• 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. ('Working scientifically' specifies the understanding of the nature, processes and methods of science for each year group and is embedded within knowledge development.) The 5 types of enquiry will include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing• equip students with the scientific knowledge required to understand the uses and implications of science, today and for the future
APPROACH	<p>At CTK, we will have a consistent planning scheme that engages our children, where the main focus is on the children understanding the context of the lesson through a big question. Context provides the rationale for learning. It links the physical world to scientific ideas, in a similar way to practical work. This is important as it serves as a great starting point to introduce the learning in a way that makes sense to the children, has relevance and sparks curiosity.</p>

	<p>Children work scientifically from EYFS, developing progression in their skills of observation, questioning, use of equipment, classifying, measuring and recording, reporting, drawing Conclusions, explaining and using evidence to support/ refute claims as they progress through key stages.</p> <p>To summarise we will:</p> <ul style="list-style-type: none"> • Teach correct terminology from KS1. • Provide a context • Link to scientists in a particular field • Use stories to help memory • Choose how to work scientifically • Provide opportunities for pupils to apply knowledge • Pre assess, post assess and use information formatively for flashbacks and micro-teaching of any misconceptions and retention of key knowledge. <p>After assessing prior knowledge, the lesson follows the following structure:</p> <ul style="list-style-type: none"> • Present the problem • Engage –AFL address misconceptions • Share technical vocabulary • Introduce new knowledge-in focus/context i.e. linked to story • Build on the knowledge • Children apply learning/record • Outcomes to inform next lesson
RESOURCES	<ul style="list-style-type: none"> • Teachers are encouraged to keep resources within year groups in classrooms. There are also some centrally stored resources in the science cupboard. Foundation Stage resources are stored within their own classrooms. • Staff notify the co-ordinator of any extra resources required, of any breakages or losses that occur and of any new materials needed. • Unsupervised children are not allowed to collect resources. <p>Sheets are discouraged within our science scheme; instead lessons revolve around a key question that children respond to in their books. Key vocabulary, knowledge mats and various activities such as correcting diagrams, true/false and odd one out may be used to stimulate thinking and response.</p>
EYFS	<p>In EYFS – Understanding the world: children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate</p>

	<p>environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.</p> <p>Reception classes are taught the required science elements of the foundation stage document through cross curricular themes</p>
SEN	<p>The concept ideas ensure all children access the science curriculum as an inclusive curriculum in which the children can record their own ideas in accordance with their own ability – drawing/writing/diagrams/tables/graphs/ recorded Seesaw evidence. Staff follow the SEND policy.</p>
TIME ALLOCATION	<p>Science is a core subject in the National Curriculum. The fundamental skills, knowledge and concepts of the subjects are currently set out in “Science in the National Curriculum”</p> <p>Each year group from years 1-6 receives at least 1 hour of science instruction once a week. In FS1/2 the required science elements of the foundation stage document are taught through cross curricular themes and targeted group work and provision.</p>
ASSESSMENT	<p>Assessment is carried out at the end of each topic in the form of a Science Memory Mat. This will be used at the start of each lesson for the topic, to ensure the key knowledge is reviewed and embedded and then at the end of the unit, information/words are removed from the mat for assessment. This will also inform teachers of any gaps for re-cap sessions/microteaching. From Year 3 to 6, some formal science questions will be used to ensure pupils are exposed to these formal style questions.</p> <p>Science work is marked in accordance with our marking and feedback policy.</p> <p>At the end of each term, teachers will indicate children’s attainment on INSIGHT TRACKING (below/just below and on-track only).</p> <p>In EYFS, science assessment is ongoing and observations inform next step planning. Evidence is collected throughout the year and it includes photographs and evidence slips or post-it note annotations collated into a class evidence book or on Seesaw.</p>
MONITORING AND REVIEW	<p>At Christ The King we moderate and monitor science as a part of our self-evaluation approach to maintaining standards and supporting staff in their teaching.</p> <p>Science moderation involves analysis of children’s work in relation to expectations for the key phase- KS1, LKs2, UKs2. Book monitoring is completed each term by the science co-ordinator.</p> <ul style="list-style-type: none"> • The subject leader will monitor teaching and learning, ensuring that the content of the national curriculum is covered across all phases of pupils’ education. This is done through lesson observation, pupil voice and book moderation. • The link governor from the curriculum committee of the governing body is briefed to oversee the teaching of science, and meets with the subject leader to review progress. <p>Science monitoring achieves the following:</p>

	<ul style="list-style-type: none"> • To gain insight into the nature of science teaching across the school and ensure consistency in approach. • It gives class teachers the opportunity to review their own practice and discuss teaching science with a subject specialist. • It gives the science leader an insight in to areas of strengths, enabling good practice to be shared among colleagues. • It allows resources to audited and for the assessment of current and future resource requirements. • It allows the science leader to set targets, demonstrating the schools commitment to self-evaluation and improvement of standards in science.
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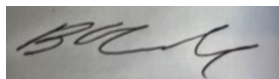
Signed by: _____



Headteacher

Date: 14/11/2024

Signed by: _____



Chair of governors

Date: 14/11/2024

Policy to be reviewed: Autumn 2026