

Coleshill Church of England Primary School

Inspiring our children to flourish and enjoy 'Life in all its
fullness' (John 10:10)



Science Curriculum Policy September 2021

Date adopted by Governing Body:

Reviewer:

Coleshill Church of England Primary School

OUR VISION

Our school's purpose is built upon the fundamental principle that **every child matters to God** and has the right to be treated with dignity, learn about their innate worth and understand their unique value and place in God's world. We provide positive opportunities for all children to experience a community living out Christian values and making choices which lead to **hope, aspiration and fulfilment**.

We believe our school should be **a place where we all want to be**; a place where children feel safe and secure, where God's love is reflected in our care for every individual. We nurture our community, ensuring **children flourish** physically, mentally, emotionally and spiritually thereby achieving their potential. As a church school we find inspiration in the life and teachings of Jesus Christ, celebrating the diversity around and amongst us and applying our understanding of tolerance and respect.

Our curriculum is about **bringing engagement, fun and enthusiasm to learning**. We aspire to provide outstanding educational experiences which will inspire children to develop into lifelong independent learners. **Our high expectations develop character** and pride in our identity as Coleshill Church of England Primary school, preparing every child for their future.

OUR VALUES

HONESTY

With God's love, we are truthful so we can be trusted and grow in wisdom.

"Speak the truth in love." (Ephesians 4: 15)

We want our children to be honest with their words (telling the truth not lies), honest with themselves (have I really given my best?) and honest with their actions.

KINDNESS

With God's love, our words and actions are thoughtful and friendly, so everyone in our community feels welcome.

"Clothe yourselves with kindness, humility, gentleness and patience." (Colossians 3: 12)

We want children at Coleshill to understand that kindness should be offered to all, not just our friends or those who are equally kind to us.

PERSEVERANCE

With God's love, we have the highest expectations of ourselves, so we keep trying even when we find things hard.

"Perseverance (produces) character and character, hope." (Romans 5: 4)

We want children at Coleshill to develop perseverance so that when things get hard they will keep going. If they get stuck they will find another way to solve a problem and for them to understand that to fail isn't the end, it's just the First Attempt In Learning.

RESPECT

With God's love, we care for others, ourselves and our school, so we listen and use good manners.

"In humility, value others above yourselves." (Philippians 2: 3)

We want children at Coleshill to show respect for everyone and everything around them; looking after the things we have and treating others the way we would like to be treated.

SELF-CONTROL

With God's love, we stop and think about our feelings and actions, so we keep ourselves and others learning and safe.

"The Holy Spirit produces this kind of fruit in our lives: love, joy, peace, patience, kindness, goodness, faithfulness, gentleness and self-control." (Galatians 5: 22)

We want children at Coleshill to be able to resist the negative temptations around them and make good decisions; to laugh when it's time to laugh but to work and give their all when it's time to learn.

Curriculum Intent Statement:

In a World where science paves the way for 'better' ways to live, it is vital that we nurture and educate our young people, who could then become scientists in the not-so-distant future, to have curious and enquiring minds. We inspire our children to grow up with a love for the natural world; where they will notice details and will want to make a difference to our World. We guide our children to grow up with an excitement for exploring processes and asking questions; where answers lead them to probe for more knowledge and their enthusiasm leads them to be life-long independent learners. We provide our children with opportunities to excel in their science learning; to reach our high expectations; for boys to reach equal standards and progress as our girls; and pupils to develop their school values.

Please visit the Curriculum page on our website :

Here you will find documents related to this policy, which include:

- Curriculum Intent, Implementation and Impact
- Skills Progression

Legislation and guidance

This policy reflects the requirements of the National Curriculum programmes of study, which all maintained schools in England must teach. It also reflects requirements for inclusion and equality as set out in the Special Educational Needs and Disability Code of Practice 2014 and Equality Act 2010, and refers to curriculum-related expectations of Governing Boards set out in the Department for Education's Governance Handbook.

Subject Leaders

English	Jessica Rutherford	History	Rebecca Millward	Computing	Tiffany Bunn
Maths	Wade Jolley	Geography	Jade Conway	Music	Sarah Matthews
Science	Sally Fagg	Art	Alice Jones	PE	Tara Jerromes
SEND	Emma Hughes	DT	Alice Jones	School Council	Sarah Matthews
Growth Mindset	Ali Currin	RE	Jenny Owen	Peer Mediation	Jade Conway

Curriculum Implementation

Through the well-structured published Mastery scheme of work 'ARKCurriculum+', pupils' learning follows a systematic approach. This scheme makes cohesive links and is fully aligned to all three disciplines (biology, physics and chemistry) in the National Curriculum objectives and is accessed through reading for information, discussion, and practical opportunities to work scientifically: observing over time, pattern seeking, identifying, classifying and grouping, comparative and fair testing and researching using secondary sources. Over each unit, across an academic year and from year-to-year, the units of work ensure pupils gain the knowledge and skills they need to discover, understand and begin to explain the world and phenomena around them in their own lives and in the lives of others. Teachers follow the scheme with its high-quality visual resources and adapt 'how' they may present and teach elements to best suit their pupils' needs. Each pupil completes a booklet as part of their learning journey through each unit. Supporting the implementation of our school's learning policy of 'Interrupting the Forgetting' (ITFs), the lessons start with a short quiz to recap language and concepts from previous lessons. Dependent on the unit of work, units (approximately 12 hours) can be taught as a block of lessons or spread over a few weeks.

Our school grounds provide an excellent environment for pupils to explore a range of elements of biology, in particular. This is complemented, and juxtaposed, by a programme of annual visits to the local farm, Southfields, where we work closely with the farmer to provide progressive learning year on year. Additionally, staff are encouraged to bring their pupils' science learning to life where visitors or other trips (a local beekeeper, the Science museum, The Planetarium...) can be planned to enhance the lessons.

Assessment: All science units of work support teachers in covering the curriculum objectives to reach at least expected standards. Teachers use Rising Stars 'pre' and 'post' paper tests to gather summative assessment information on their pupils' achievements. During teaching, staff use the lesson quizzes, questioning, pupils' booklets and learning observations, to make formative judgements on their pupils' comprehension of scientific concepts. Teachers use a whole-school assessment book which makes connections between year groups' units of work, provides teachers with the chance to plan their units' starting point and 'green route' based on prior achievements, make judgements on what pupils have achieved currently, but also to see where the learning is heading in future years.

Resources: Many resources are suggested as part of our school's science scheme however teachers are given the flexibility to use their professional judgement on which resources would be best to teach the focussed objectives. Science is taught through a huge range of resources: outdoors, practical, visual, video/ internet, digital, e.g. Digi-scope, data loggers, ...photography including time-lapse, visits and visitors. Staff are responsible for being organised and creative in their planning and preparation for teaching science lessons.

Reading in Science: The ARKcurriculum+ uses reading as it's core method to equip pupils to master the three scientific disciplines. They do this by reading to understand its fundamental concepts in sufficient depth that they can apply subject knowledge in unfamiliar contexts. Currently, we are working to find suitable additional texts which are related to the units of work. Staff can choose to read relevant texts with their pupils or recommend them for pupils to read independently.

Transferable knowledge, Cultural Capital and Wider Curriculum: Opportunities to develop their understanding of society and what makes a good citizen are interwoven into many aspects of the science and wider curriculum, namely the impact humans have on our World and key figures in the Science World to learn from. We hold science events and competitions during each academic year, for example, Science week, The Big Science Share... Connections are made with our local community, for example, using the knowledge, experience and enthusiasm of local farmers, 'eco' heroes, the Mayor, allotment holders... to encourage pupils to gain interest in our surrounding environment.

Curriculum Impact

In a World where science paves the way for 'better' ways to live, we believe that the impact of our curriculum - measured through pupil voice, assessments, book-looks, questionnaires and observations - demonstrates that pupils have developed scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Our monitoring checks that they have gained the ability to question, find ways to answer, build skills and obtain knowledge that will ensure they have what is required for science now and in the future. Pupil voice is a key method we use to establish their interest, enthusiasm and understanding of concepts covered in science teaching. From monitoring during the academic year, analysis of staff's strengths and weaknesses, their subject knowledge, their confidence to teach science and their adaptability are celebrated and actioned suitably through CPD.

Roles and Responsibilities

Governing Body

The Governing Body will monitor the effectiveness of this Science Policy and hold the Headteacher to account for its implementation.

The Governing Body will also ensure that:

- A robust framework is in place for setting curriculum priorities and aspirational targets
- Enough teaching time is provided for pupils to cover the National Curriculum and other statutory requirements
- Provision is made for pupils with different abilities and needs, including pupils with Special Educational Needs and Disability (SEND) and those pupils in receipt of Pupil Premium Grant (PPG) referred to in DfE documentation as Disadvantaged Pupils (including Looked After Children – LAC)
- The school implements the relevant statutory assessment arrangements
- It participates actively in decision-making about the breadth and balance of the curriculum

Headteacher

The Headteacher is responsible for ensuring that the Science Policy is adhered to, and that:

- All required elements of the Art & Design curriculum, and those subjects which the school chooses to offer, have aims and objectives which reflect the vision and values of the school and indicate how the needs of individual pupils will be met
- The amount of time provided for teaching the required elements of the curriculum is adequate and is reviewed by the Governing Board
- They manage requests to withdraw children from curriculum subjects, where appropriate
- The school's procedures for assessment meet all legal requirements
- The Governing Body is fully involved in decision-making processes that relate to the breadth and balance of the curriculum
- The Governing Body is advised by School Leaders about the school's performance and pupil outcomes to make informed decisions for the School Improvement Plan and CPD program for all staff
- Appropriate provision is in place for pupils with different abilities and needs, including pupils with SEN and Disadvantaged Pupils (including Looked After Children – LAC)

Curriculum Leader

The Curriculum Leader is responsible for monitoring the curriculum, including the development of medium term and short term planning, as well as the standards within the Curriculum books. Also, the Curriculum Leader evaluates the Quality of Education for each year group by lesson visits, scrutiny of pupils' work and pupil discussions; this provides key strengths and areas of development to further develop the Languages curriculum. Within our professional development procedures, the Curriculum Leader is given training and the opportunity to keep developing their own subject knowledge, skills and understanding; as a result, they can support curriculum development and their colleagues throughout the school. The Curriculum Leader also has the responsibility for monitoring the storage, maintenance and management of resources.

Teaching Staff

Other staff will ensure that the school curriculum is implemented in accordance with this Curriculum Policy. All class teachers follow the school's agreed planning for the curriculum provision in Curriculum.

Inclusion

Further information, related to SEND, can be found on our School, Website and includes:

- School Offer for SEND
- Equality and Accessibility Policy
- SEND Policy
- Equality Duty and Objectives

Teachers set high expectations for all pupils. They will use appropriate assessment and work for all pupil groups, which including:

- More able pupils
- Pupils with SEND
- Pupils with low prior attainment
- Pupils with English as an additional language (EAL)
- Disadvantaged Pupils

Teachers will plan lessons so that pupils with SEND are able to access and can study every National Curriculum subject, wherever possible; resources will be carefully planned and additional adults purposefully deployed to support learning in lessons. Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects.

Monitoring and Evaluation

Procedures

The Governing Body monitors the coverage of National Curriculum subjects and compliance with other statutory requirements through:

- Visits to the school
- Link Governor meetings with Curriculum Subject Leader
- Link Governor discussions with pupils about the Curriculum curriculum as part of wider views about the Quality of Education
- Senior Leaders and the Curriculum Leader monitor and evaluate the way that the Art and Design curriculum is taught throughout the school by:
 - Discussions with staff about the provision, teaching and assessment and CPD opportunities in the curriculum
 - Curriculum pupil discussions, which evaluate the impact of CPD, inform next steps for teaching and assessment and planning for CPD provision for all staff

· Scrutiny of pupils' work

- Scrutiny of planning, where appropriate (e.g. to evaluate the impact of CPD or the implementation of a revised approach to teaching or use of resources)

Links with other policies

This Curriculum Policy links to the following policies and procedures:

- All subject leader policies
- SEND policy
- Behaviour Policy
- Growth Mindset Policy

This Curriculum Policy will be reviewed by the Headteacher. At every review, it will be shared with the Full Governing Board to be approved. The Curriculum Policy will be reviewed, in line with any:

- Amendments or review of the National Curriculum
- Relevant curriculum updates linked to current educational research, practice or policy
- DfE advice, guidance or recommendations about the curriculum
- Review of the school's approach, practice or policy for the Curriculum Intent, Implementation and Impact