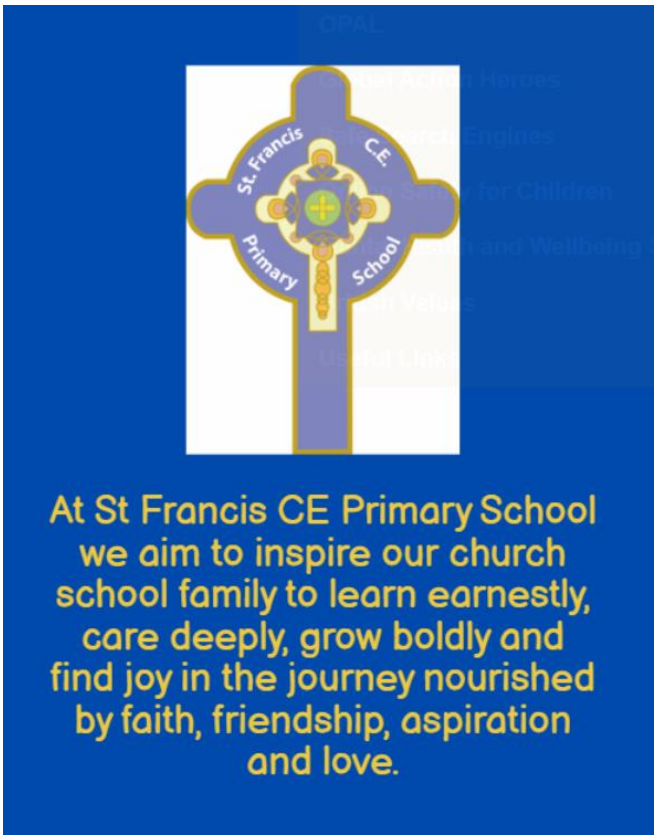
St Francis Church of England Primary School



Our vision, mission statement and values are at the core of everything we do. They underpin our teaching and learning, interactions and environment.

Policy Title:

Maths Policy

Date of Policy:	Spring Term 2020	**Review Cycle:**	Annually
Policy Review Date:	Summer Term 2021	**Updates:**	Updated role of teachers in line with changes to T+L policy, made link changes to new EYFS documentation, split planning and assessment, included teaching model, made links to T+L policy for planning and assessment, included Mode A:Mode B teaching.
Policy Review Date:	Autumn Term 2025	**Updates:**	Updated Aims and Vision, Implementation, EYFS provision, Planning, SEND, Assessment and Monitoring.
Policy Review Date:		**Updates:**	
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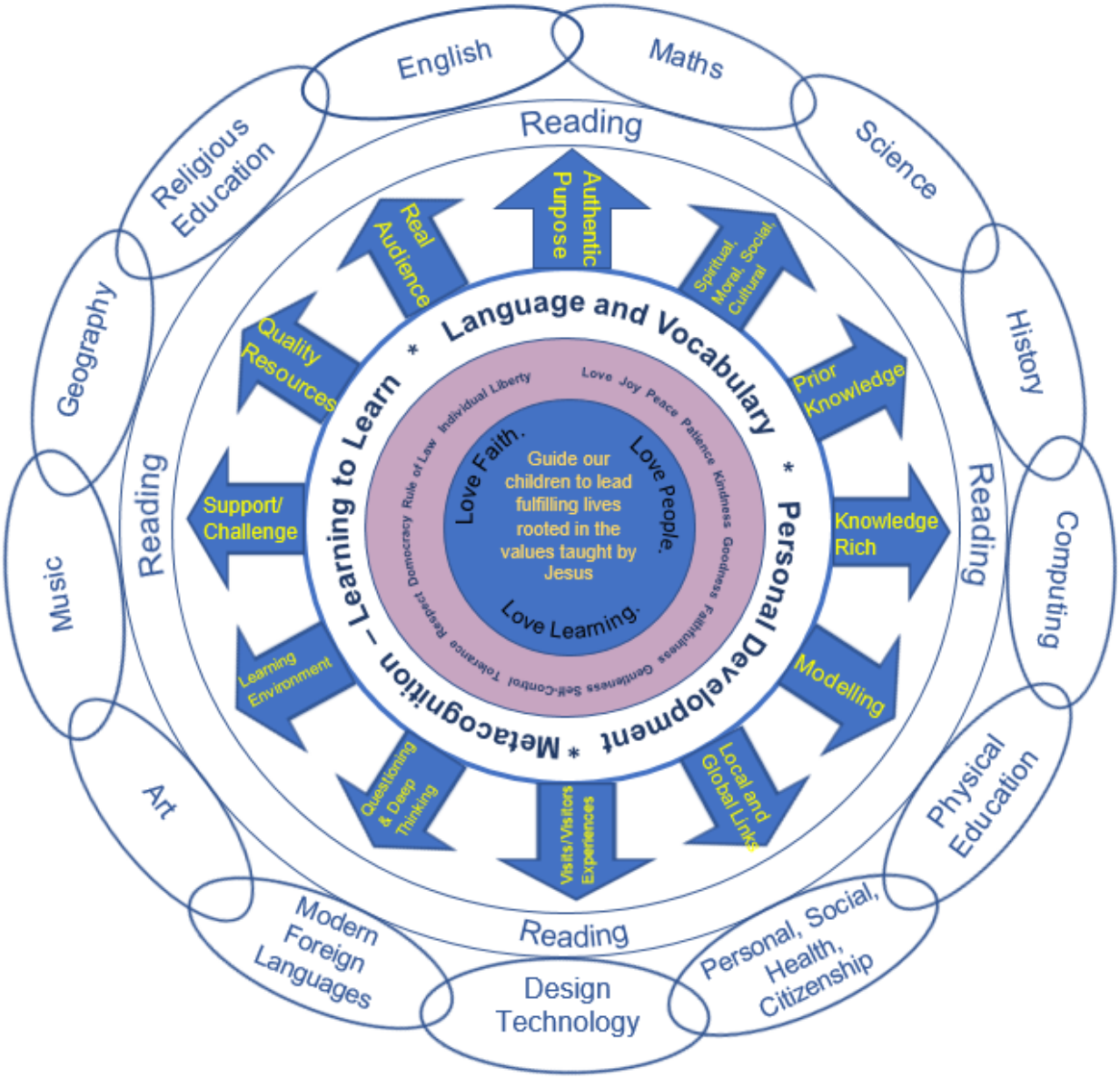
Headteacher: *C Foster* Chair of Governors: *N.Duffy*

MODEL OF CURRICULUM



1) School Subject Aims and Vision

At St. Francis, we believe that mathematics is essential to everyday life. A high-quality mathematics education, therefore, provides a foundation for understanding the world, the ability to reason mathematically and a sense of enjoyment and curiosity about the subject.
Our school's policy for Mathematics is based on the National Curriculum for Mathematics and the Mathematics sections of the Statutory Framework for the Early Years Foundation Stage.
At St. Francis we aim to:

- Provide our children with the opportunity to work both independently and in co-operation with others, allowing them to gain confidence in their own abilities and encouraging them to become more independent learners.

- To develop in our children a competence and confidence in mathematics knowledge, concepts and skills.
- To develop in our children an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- To develop in our children the ability to discuss their thoughts and ideas using appropriate mathematical language.

2) Implementation

This policy will have regard to the following statutory and non-statutory guidance within the primary national curriculum. Available at: Primary National Curriculum

In the 2023/2024 academic year, we began our 'Mastery Journey'. This entailed joining one of the Maths Hubs (Abacus NW), funded by the Department for Education (DfE) and delivered through the National Centre for Excellence in the Teaching of Mathematics (NCETM). We worked collaberatively with different schools in TRGs (Teacher Research Groups) to develop our understanding of the Mastery approach. In the 2024, we started our 'Embedding' phase of Teaching for Mastery (TfM). As we became a 'Sustaining' school from 2025, our Maths Policy has adapted to reflect Mastery teaching, including a new Calculation Policy. Our Maths Policy fully reflects our TfM approach, and this will be sustained for years to come.

St. Francis now follows NCETM Curriculum Prioritisation. The pupils in EYFS to Year 6 receive a daily Mathematics lesson with additional time given to the practise and testing of tables and number facts. EYFS to Year 5 take part in daily Mastering Number sessions to improve fluency in number and calculation.

3) ROLES AND RESPONSIBILITIES

3.1 Role of Subject Leader

The Teaching and Learning Policy, page 3 – section 1.3 states:

'Subject Leaders will:

- *Develop and review curriculum policies and schemes of work in collaboration with colleagues.*
- *Ensure that all relevant required subject leadership paperwork is carried out, for example, subject action plan and leader reports.*
- *Take accountability for the progress of children in their given subject.*
- *Report on the effectiveness of the curriculum to the senior leadership team and the governing body.*
- *Provide professional advice to the governors' curriculum sub-committee.*
- *Ensure their Scheme of Work details the following: National Curriculum coverage, Objectives, Precise Knowledge, Vocabulary, Links to visits/visitors/experience, Map of prior learning, Links to SMSC, Christian values and mission statement.*
- *Keep up-to-date through reading and attending relevant courses*
- *Sharing subject knowledge and pedagogy amongst colleagues to distribute best practice across the school'*

3.2 Role of Class Teacher

The Teaching and Learning Policy, page 3-4 – section 1.4 states:

'Teachers will:

- *Teach using the instructional and pupil culture routine to echo the learning science the teaching and learning is based upon.*
- *Have strong formative assessment within lessons that drives their instruction to ensure children's learning needs are met.*
- *Hold the mindset of 'No-opt Out'; ensure 100% compliance and utilise routines to ensure high engagement in learning from all children, irrespective of ability*
- *Utilise mixed ability or flexible groups to meet need.*

- *Be reflective practitioners.*
- *Take on board all training opportunities provided by changing and adapting teaching pedagogy.*
- *Accurately monitor and evaluate their teaching against the national teaching standards and their appraisal targets.*
- *Seek professional dialogue and constructive criticism from senior leaders, teaching colleagues or subject leaders.*
- *Review and evaluate their planning regularly to ensure it meets with subject consistencies laid out in subject policy and the staff handbook.*
- *Set appropriate and challenging targets for pupils based on ability.*
- *Collaborate with colleagues to moderate pupil achievement.*
- *Involve parents and other professionals in the learning process.*
- *Complete all relevant assessment data required through the assessment cycle.*
- *Promote a growth mindset for the children, utilising metacognitive research.*
- *Consider the welfare and safety of children and act within the safeguarding policy as we believe effective learners have to be safe learners.*
- *Provide a challenging and stimulating curriculum, designed to encourage all children to reach the highest standards of achievement*
- *Ensure that their lessons develop children's deeper thinking and use strategies to support the transference of knowledge to the long-term memory*
- *Be excellent role models, punctual, well prepared and organised.*
- *Have a positive attitude to change and the development of their own expertise.*
- *Ensure that their teaching promotes the love of learning through the use of a range of strategies, including visits, visitors and experiences.*
- *Manage behaviour consistently through the school's behaviour policy*

4) EYFS PROVISION

The teaching of this subject relates to the following areas of the EYFS framework:
ELG 11. Number: Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG 12. Numerical Patterns: Verbally count beyond 20, recognising the pattern of the counting system. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

The EYFS statutory framework can be found at: EYFS Statutory Framework
The EYFS non-statutory Development Matters guidance can be found at: Development Matters

There are six key areas in EYFS mathematics. EYFS follow Mastering Number for daily maths lessons, including cardinality and counting, comparison and composition, for four days of the week. On the fifth day the key areas of pattern, shape and space and measures are taught.

5) THE NATIONAL CURRICULUM

The teaching of the curriculum for the named subject links directly and ensures appropriate coverage of the Primary National Curriculum.

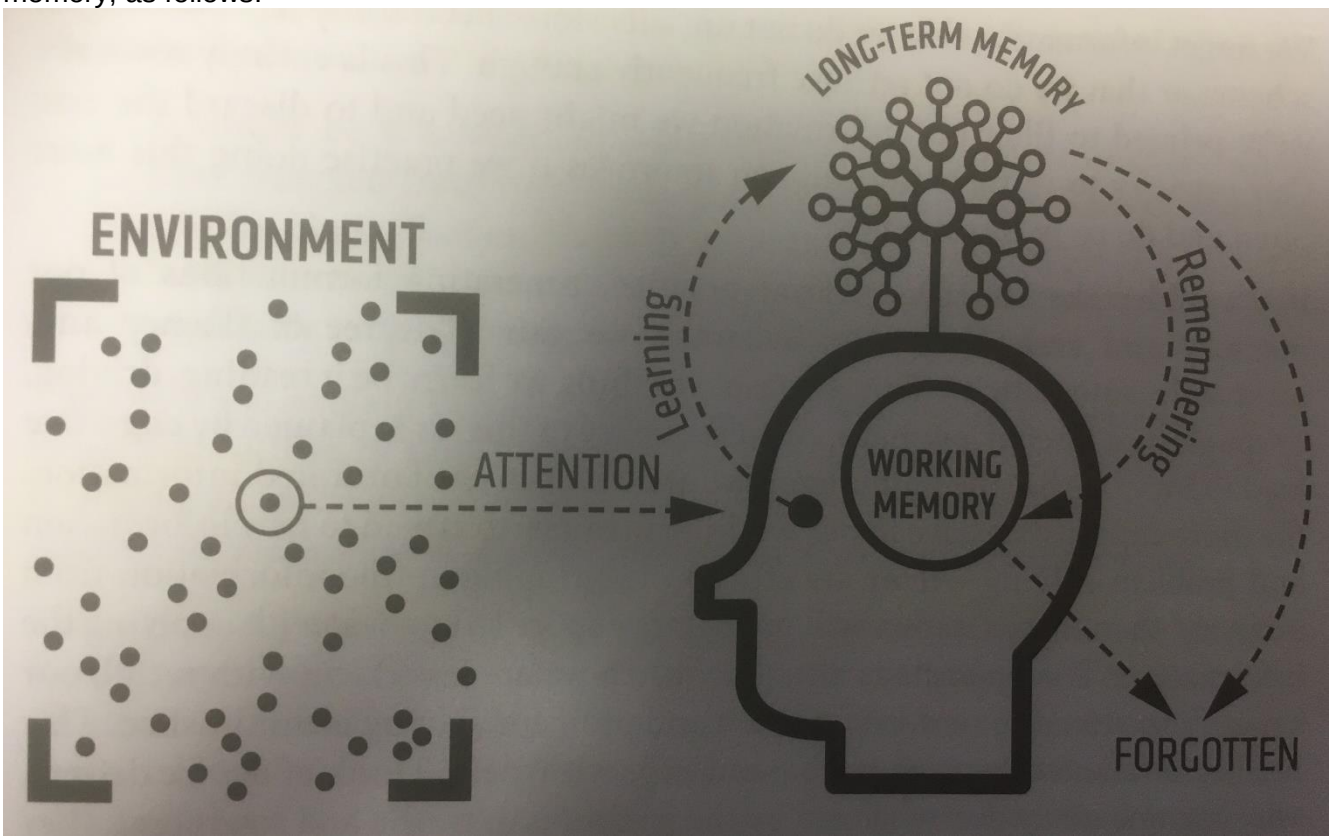
The Primary National Curriculum can be found at: Primary National Curriculum

6) OUR TEACHING MODEL

Our teaching and learning is based upon research around how learning works. This is the foundation as to how we teach at St. Francis CEP School.

Tom Sherrington – Rosenshine's Principles in Action

A simple model for how memory works is based on the concept of building schemata in our long-term memory, as follows:



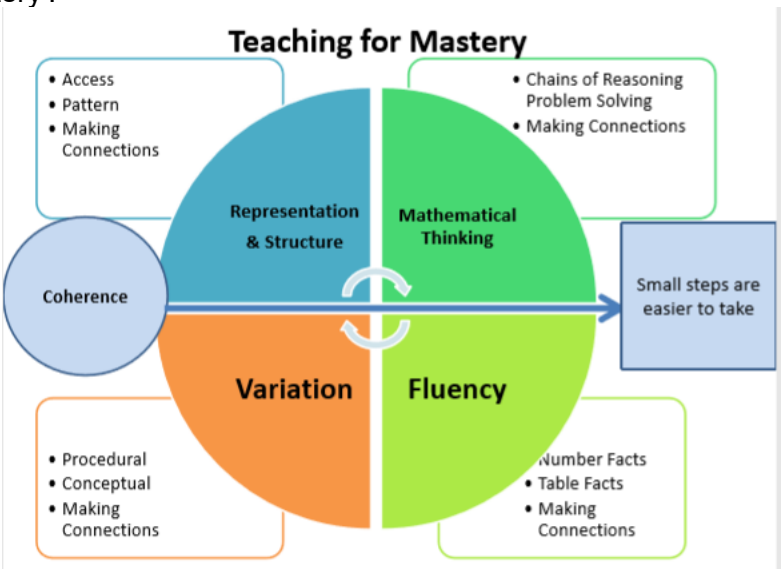
See section 4 of our Teaching and Learning Policy for more information as to how we teach to support this model. Our Teaching and Learning Policy can be found here.

7) PLANNING

Long term planning

The Long Term Plan (LTP) is taken from the NCETMs Curriculum Prioritisation documents and their lesson overviews are used to inform our Medium-Term Plan (MTP). The LTP is used as a guidance tool in order to pace out coverage of the curriculum throughout the year. Teachers are encouraged to use professional discretion when deciding on how long is needed to cover a particular curriculum area whilst ensuring all objectives are covered by the end of the academic year.

Medium Term Planning
When teachers are planning a unit of work, they consider a set of criteria (see below) which relate to the '5 Big ideas of mastery'.



Short term Planning
Teachers are not expected to provide short-term plans - the slides (NCETM and Oak National) are the plan. Teachers are encouraged to think carefully about each representation, question, challenge question etc. using the medium-term plans to support them.

Fluency
Mastering Number is used in EYFS to Year 5 to increase fluency.
Children in Year 2 to Year 4 do daily times tables tests and chanting to learn times tables fluently.
In lessons children are taught to:

- Develop the fluency in mental methods, encouraging pupils to **calculate rather than count** e.g. using known facts to solve unknown facts. Example- when adding 8+6 pupils are encouraged to add 8+2+4. This can apply to larger numbers such as 68+6, 708+6 etc.
- Develop fluency in written formal methods. Informal methods are used for a short period of time and are used as a stepping stone for formal written methods.

Reasoning
Teachers promote Reasoning skills by asking questions such as *'What's the same and what's different?' Which is the odd one out?; True or false?; Convince me; Always Sometimes or Never?* The NCETM progression document supports teachers with this. Teachers also use reasoning prompts for written explanations e.g. *I noticed… I agree because…*

Stem sentences
Stem sentences help children to communicate their ideas with mathematical precision and clarity. These sentence structures often express key conceptual ideas or generalities and provide a framework to embed conceptual knowledge and build understanding. Teachers plan for these during a unit of work. For example: ***If the whole is divided into three equal parts, one part is one third of the whole.*** Having modelled the sentence, the teacher asks individual pupils to repeat this, before asking the whole class to chorus chant the sentence. This provides children with a valuable sentence for talking about fractions, for example. Repeated use helps to embed key conceptual knowledge.

Precise vocabulary
In every lesson, children are expected to use precise mathematical vocabulary. Working walls support this too.

Other areas that teachers consider in their short-term plans
- The objectives are broken down into smaller steps.
- Teachers reinforce what the number represents in an equation e.g. 10-4=6, 4x5=20, 50÷10=5? *Which number is the whole, part, size of group, number of groups, factor, product, dividend, divisor, quotient etc.?*
- Regular assessments or quizzes are planned to check understanding and aid working memory.
- Questions to support and challenge understanding are planned for prior to the lesson.
- The use of manipulatives to promote understanding and scaffold learning.

Adaptive teaching
Teaching is adapted to provide targeted, positive support to help those who have difficulties with mathematics, as well as those who are rapid graspers. The aim is that all children achieve the same learning outcome with adaptive teaching being the way in which different groups of children are supported to achieve this.

Interventions
If a pupil fails to grasp a concept or procedure, this is identified quickly and early intervention (usually on the same day) ensures the pupil is ready to move forward with the whole class in the next lesson. Where bigger gaps in learning are identified, children may take part in intervention groups.

Our Teaching and Learning Policy can be found here. This sets out our whole school teaching and learning strategies for all subjects including Maths.

8) Special Educational Needs and Disabilities (SEND)
Daily maths lessons are inclusive to pupils with SEND. Where required, children's individual support plans incorporate suitable objectives from the National Curriculum for Mathematics or Development Matters, and teachers refer to these when planning. These targets may be worked upon within the lesson as well as a 1:1 basis, or within a small group, outside the maths lessons. Maths focussed intervention in school helps pupils with gaps in their learning and mathematical understanding. These are delivered by teachers and support staff and overseen by the SENDCo and the class teacher. Within the daily maths lesson, teachers have responsibility to not only provide differentiated activities and resources to support children with SEND, but also activities that provide sufficient challenge for children who are high achievers. It is the teacher's responsibility to ensure that all children are challenged at a level appropriate to their ability.

See our Special Educational Needs and/or Disability policy here.

9) ASSESSMENT
Children will be assessed through the use of formative assessment during check rounds, mini quizzes and exit tickets. Summative assessment requires children to complete three rounds of Assessments (Maths Lead written and taken from TestBase and DfE Guidance in Mathematics assessment questions) in Years 1, 3, 4 and 5 with Years 2 and 6 substituting those with mock SATs examinations. Each term, a pupil progress meeting will focus on maths assessments and progress, based on Assessments/SATs exams and teacher conversation.

The teaching and learning policy sets out the processes of assessment in our school.

Statutory Summative Assessment
- Reception Baseline Assessment will be carried out during the first 6 weeks of Reception Year.
- EYFS profile will be completed for every child in the final term of their Reception year to assess their development; to make the transition to Year 1 smoother; and to help the Year 1 teacher plan a curriculum that will suit all of the pupils in their new class.
- Summative standardised tests (SATs) with statutory tests at the end of Years 2 (ending 2023) and Year 6.
- Year 4 Multiplication Tables Check.

10) SPIRITUAL, MORAL, SOCIAL AND CULTURAL (SMSC) DEVELOPMENT

Definition of SMSC:

Spiritual

Explore beliefs and experience; respect faiths, feelings and values; enjoy learning about oneself, others and the surrounding world; use imagination and creativity; reflect.

Moral

Recognise right and wrong; respect the law; understand consequences; investigate moral and ethical issues; offer reasoned views.

Social

Use a range of social skills; participate in the local community; appreciate diverse viewpoints; participate, volunteer and cooperate; resolve conflict; engage with the 'British values' of democracy, the rule of law, liberty, respect and tolerance.

Cultural

Appreciate cultural influences; appreciate the role of Britain's parliamentary system; participate in culture opportunities; understand, accept, respect and celebrate diversity.

Opportunities for SMSC throughout the curriculum offer is extremely important. Please see curriculum map to view the intentional and purposeful planning of SMSC learning.

11) MONITORING

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Maths	Book scrutiny	Lesson obs	data scrutiny	Book scrutiny	Pupil Voice	data scrutiny

12) HEALTH AND SAFETY CONSIDERATIONS

Children will be working with concrete resources, some with sharp edges, some of a certain size. Before administering the resources, talk takes place about not only caring for the equipment but using it in a safe and secure way.

See our Health and Safety policy here.