



Maths Policy

Reviewed November 2021

Date	Review Date	Coordinator	Nominated Governor
November 2021		Sophie Giles	William Mordaunt

MISSION STATEMENT

Corpus Christi Catholic School is a welcoming, vibrant and diverse community with the Christian values of respect, equality and love for all at its core.

We aim to nurture, motivate, educate and to inspire all children to become lifelong learners and to achieve the best that they can.

Following the example of Jesus, we uphold our school motto:
To Learn, To Live, To Love.

Discere Vivere Amare




CORPUS CHRISTI CATHOLIC SCHOOL

POLICY STATEMENT:

Mathematics “is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.” (The National Curriculum in England Framework Document (DfE) 2014)

At Corpus Christi we seek to provide all children with a solid foundation in the key areas of Number, Measure, Geometry and Statistics. We have a duty to ensure compliance with the revised National Curriculum and with the application of current programmes of study and attainment targets. We understand that the National Curriculum provides pupils with an introduction to the core knowledge that they need to be educated citizens.

We strive to build a curriculum that is engaging and enjoyable for all children and inspires a long-lasting love of Mathematics. Through a range of teaching and learning styles, we ensure that all pupils access learning objectives and participate fully in lessons. We promote the progress of all pupils through carefully planned lessons, regular assessment and targeted intervention. This can only be achieved by using the experience, enthusiasm and specialism of individual teachers and a structured well-ordered classroom environment.

Annually we undertake a subject evaluation that is based on the following questions:

- How do we design and provide a curriculum that is broad and balanced for all pupils? (Curriculum Intent)
- How do we deliver our curriculum through teaching, assessment and feedback? (Curriculum Implementation)
- How do we assess pupil achievement through external tests/exam results and by our own school data? (Curriculum Impact)

We wish to work closely with the School Council and to hear their views and opinions as we acknowledge and support Article 12 of the United Nations Convention on the Rights of the Child that children should be encouraged to form and to express their views.

We as a school community have a commitment to promote equality. Therefore, an equality impact assessment has been undertaken and we believe this policy is in line with the Equality Act 2010.

We all have a responsibility to ensure equality permeates into all aspects of school life and that everyone is treated equally irrespective of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. We want everyone connected with this school to feel safe, secure, valued and of equal worth.

We acknowledge the findings of the Race Disparity Audit that clearly shows how people of different ethnicities are treated across the public services of health, education, employment and the criminal justice system.

The educational section of the audit that covers: differences by region; attainment and economic disadvantage; exclusions and abuse; and destinations, has a significant importance for the strategic planning of this school.

We believe it is essential that this policy clearly identifies and outlines the roles and responsibilities of all those involved in the procedures and arrangements that are connected with this policy.

LEGISLATION AND GUIDANCE

We believe this policy should be a working document that is fit for purpose, represents the school ethos, enables consistency and quality across the school and is related to the following legislation:

- Education Act 1996
- Education Act 1997
- Standards and Framework Act 1998
- Education (National Curriculum) (Temporary Exceptions for Individual Pupils((England) Regulations 2000
- Education Act 2003
- Equality Act 2010

The following documentation is also related to this policy:

- The Education Inspection Framework (Ofsted 2019)
- An investigation into how to assess the quality of education through curriculum intent, implementation and impact (Ofsted 2018)
- Designing and Timetabling the Primary Curriculum - a practical guide for Key Stage 1 and 2 (Qualifications and Curriculum Authority 2002)
- Equality Act 2010: Advice for Schools (DfE)
- The National Curriculum in England Framework Document (DfE) 2014
- Race Disparity Audit - Summary Findings from the Ethnicity Facts and Figures Website (Cabinet Office)

AIMS AND OBJECTIVES

Aims

To ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

(The National Curriculum in England Framework Document (DfE) 2014)

- To promote the teaching of numeracy and literacy within all subjects.
- To evaluate the school curriculum by focusing on curriculum intent, implementation and impact.
- To share good practice within the school.
- To work with other schools to share good practice in order to improve this policy.

Objectives

- To ensure teaching and learning in school supports the development of both conceptual understanding and fluency in the fundamentals of mathematics, as well as reasoning and problem-solving skills, ensuring all pupils achieve their full potential according to their ages and abilities.
- To ensure the school's teaching staff is highly trained and consists of committed teachers who have the expertise to develop the potential of all pupils.
- To provide a rich and varied curriculum that will stimulate and interest all pupils.
- To ensure teaching styles and methods vary to suit pupils' differing learning styles and abilities.
- To provide resources for all pupils that will support effective learning and teaching.
- To ensure leadership and management structures within the school support the implementation of these objectives.

ORGANISATION AND PLANNING

Strategies

Implementation of National Curriculum 2014

In the National Curriculum for 5 - 11 year olds, Mathematics is developed through five key areas:

- **Number - Place Value, Addition & Subtraction, Multiplication & Division, Fractions (including decimals and percentages)**
- **Measurement**

- **Geometry - Position & Direction, Properties of shapes**

- **Ratio and Proportion**

- **Algebra**

It is important to note the interrelated nature of all these areas and to emphasise that number (particularly number and place value) underpins all areas.

The Early Years Foundation Stage

Mathematical development is one of the seven areas of learning in the Early Years Foundation Stage. This area of learning includes; counting, ordering, subitising, comparing, calculating, sorting, matching, seeking patterns, making connections, recognising relationships and working with numbers, shapes, space and measures. Mathematical understanding is developed through stories, songs, games, imaginative play and concrete, practical experiences. This approach is continued into Year 1 until the children have achieved the Early Learning Goals.

At Key Stage One (Years 1 and 2)

The primary focus of mathematics in KS1 is that children develop confidence and fluency with whole numbers, counting and place value. Through the use of concrete materials and pictorial images, children should develop a secure understanding of the number system to a hundred and become familiar with the four operations. By the end of Year 2, children should have good recall of key number facts, such as number bonds to 20. Pupils should also develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. They should also be able to measure and compare different quantities, including mass/weight, volume/ capacity, length/ height, time and money.

At Key Stage Two (Years 3-6)

The primary focus of mathematics in KS2 is to extend the children's knowledge and understanding of the number system by including larger integers and more complex fractions and decimals. Pupils should begin to make connections between the different areas of maths and develop their ability to solve a wide range of problems, using technical vocabulary to articulate their mathematical thinking. A solid foundation in Number should also underpin further exploration of measure and geometry, and the introduction in Upper KS2 of ratio & proportion and algebra.

MONITORING ARRANGEMENTS

Monitoring of standards of children's work and the quality of teaching is the responsibility of the subject coordinator supported by the Co-Headteachers and the Senior Leadership Team. The subject coordinator is also responsible for supporting colleagues in their teaching, for being informed about current developments in mathematics teaching theory and providing a lead in direction of maths in the school.

Standards will be monitored by:

- looking at pupils' work
- subject observations
- pupil discussions
- audit of subjects
- scrutiny of planning
- general curriculum discussions

ASSESSMENT FOR LEARNING

Teachers will:

- carry out continuous purposeful assessment in a variety of ways, such as talking to the children in lessons, marking work and making observations of the children
- use formative assessment to directly inform their planning and to reaffirm that they are addressing the needs of all learners in the class
- use short-term assessments matched to the teaching objectives to adjust their planning
- make comments in pupil's books related to the teaching objective in accordance with the Marking Policy
- carry out medium-term assessments to measure progress against key objectives to adjust planning
- carry out long-term assessment to assess progress against school and national targets
- analyse long-term assessments to spot where there are gaps in children's learning
- administer national tests and assessment in Y2 and Y6
- carry out tests at the end of Y3, Y4 and Y5
- use long-term assessments to help them plan for the next academic year
- inform parents and carers of their child's progress and targets

INCLUSION

We believe that we are an educationally inclusive school as we are concerned about the teaching and learning, achievements, attitudes and well-being of all our pupils. We aim to provide places for all pupils who express a preference to join this school.

We work hard to offer equality of opportunity and diversity to all groups of pupils within school such as children:

- from both sexes;
- who have Special Educational Needs;
- who are looked after;
- from minority faiths, ethnicities, travelers, asylum seekers, refugees;
- who are gifted and talented;
- who are at risk of disaffection;
- who are young carers;
- who are sick;
- who have behavioural, emotional and social needs;
- from families who are under stress

We believe we have a duty to ensure that all children have equal rights to the opportunities offered by education and that all children will be encouraged to fulfil their potential in their academic, physical and creative achievements.

We want to give all children the right to access high quality educational experiences, to take part in a broad and balanced curriculum and to be part of the social life of the school.

We recognise that within the school we have more able, gifted and talented children. We believe that:

- more able children demonstrate a higher ability than average for the class and often require differentiated tasks and opportunities to learn through challenges;
- gifted children are those who have the ability to do well in more than one subject;
- talented children demonstrate an innate talent or skill in creative, cultural or sporting fields

We have an even greater obligation to plan and deliver well-structured lessons with appropriate assessment plus ambitious targets for pupils who have low levels of prior attainment or come from disadvantaged backgrounds.

Also, we have a duty to cater for pupils whose first language is not English by planning teaching opportunities to help them develop their English and to gain full access to the National Curriculum.

EQUALITY IMPACT ASSESSMENT

Under the Equality Act 2010 we have a duty not to discriminate against people on the basis of their age, disability, gender, gender identity, pregnancy or maternity, race, religion or belief and sexual orientation.

This policy has been equality impact assessed and we believe that it is in line with the Equality Act 2010 as it is fair, it does not prioritise or disadvantage any pupil and it helps to promote equality at this school.

TRAINING

All school personnel:

- have equal chances of training, career development and promotion
- receive training on this policy on induction which specifically covers:
 - National Curriculum programmes of study and attainment targets for all subjects
 - Curriculum
 - Teaching and learning
 - Planning
 - Differentiation
 - Assessment
 - Monitoring and Evaluation
 - Special Educational Needs
 - Academically More Able, Gifted and Talented Pupils
 - Key skills
- receive periodic training so that they are kept up to date with new information
- receive equal opportunities training on induction

ROLES AND RESPONSIBILITY FOR THE POLICY

Role of the Governing Body

The Governing Body has:

- appointed a member of staff to be responsible for the curriculum leadership of Mathematics;
- delegated powers and responsibilities to the Co-headteachers to ensure all school personnel and stakeholders are aware of and comply with this policy;
- responsibility for ensuring compliance with the legal requirements of the National Curriculum;
- responsibility for ensuring that the school complies with all equalities legislation;
- nominated a designated Equalities governor to ensure that appropriate action will be taken to deal with all prejudice related incidents or incidents which are a breach of this policy;

- responsibility for ensuring funding is in place to support this policy;
- responsibility for ensuring this policy and all linked policies are maintained and updated regularly;
- responsibility for ensuring all policies are made available to parents;
- the responsibility of involving the School Council in:
 - determining this policy with the Governing Body;
 - discussing improvements to this policy during the school year;
 - organising surveys to gauge the thoughts of all pupils;
 - reviewing the effectiveness of this policy with the Governing Body
- nominated a link governor to:
 - visit the school regularly;
 - work closely with the Co-Headteachers and the coordinator;
 - ensure this policy and other linked policies are up to date;
 - ensure that everyone connected with the school is aware of this policy;
 - attend training related to this policy;
 - report to the Governing Body every term;
 - annually report to the Governing Body on the success and development of this policy.

Role of the Co-Headteachers

The Co-Headteachers will:

- work in conjunction with the Senior Leadership Team to ensure all school personnel, pupils and parents are aware of and comply with this policy;
- ensure teachers:
 - ‘have good knowledge of the subject(s) and courses they teach;
 - have effective support for those teaching outside their main areas of expertise;
 - present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching;
 - check learners’ understanding systematically, identify misconceptions accurately and provide clear, direct feedback and in doing so, they respond and adapt their teaching as necessary, without unnecessarily elaborate or differentiated approaches;
 - design their teaching to help learners to remember in the long term the content they have been taught and to integrate new knowledge into larger concepts;
 - use assessment well in order to help learners embed and use knowledge fluently or to check understanding and inform teaching;
 - create an environment that allows the learner to focus on learning;
 - develop a rigorous approach to the teaching of reading in order to develop learners’ confidence and enjoyment in reading;
 - use reading materials at the early stages of learning to read that are closely matched to learners’ phonics knowledge’. (Amended from the ‘Education Inspection Framework’ (Ofsted 2019)
- work closely with the curriculum leader, subject leaders and the link governor;
- ensure compliance with the legal requirements of the National Curriculum;
- consider disapplying a pupil from all or part of the National Curriculum for a period of time if this will benefit the child;
- encourage parents to take an active role in curriculum development;
- provide leadership and vision in respect of equality;
- provide guidance, support and training to all staff;
- monitor the effectiveness of this policy by;
 - observing teaching and learning
 - planning scrutinies and work trawls
 - discussions with pupils and members of the school council
 - annually report to the Governing Body on the success and development of this policy

Role of the Subject Leader

The Subject Leader will:

lead the development of this policy throughout the school;

- work closely with the Co-Headteachers, the nominated governor and SENCO;
- promote the teaching of numeracy and literacy within all subjects;
- be accountable for standards in this subject area;
- monitor standards by:
 - auditing the subject area
 - review of the scheme of work
 - monitoring teachers planning
 - lesson observations
 - scrutinising children's work
 - discussions with pupils
- work in conjunction with the Headteacher, Senior Leadership Team Leader, teaching and support personnel to provide statements on each of the following:

We ...	Evidence	
INTENT	<ul style="list-style-type: none"> ▪ have constructed a 'curriculum that is ambitious and designed to give all learners the knowledge and cultural capital they need to succeed in life', by: 	using a CPA (concrete, pictorial and abstract) approach to our teaching of the curriculum, with high quality resources that create: a rich context for learning, ensuring learners are provided with a solid foundation in the key areas of Number, Measure, Geometry and Statistics.
	<ul style="list-style-type: none"> ▪ provide a curriculum that is 'coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment', by: 	ensuring objectives are covered more than once, with opportunities to apply these several times over the course of a year. Prior knowledge is consolidated from previous years, supporting children to think deeply and develop skills with depth.
	<ul style="list-style-type: none"> ▪ have the 'same academic, technical or vocational ambitions for almost all learners and we have designed an ambitious curriculum to meet the needs of some learners with high levels of SEND', by: 	ensuring planning sequences in Maths are adapted, personalised and differentiated to ensure access arrangements can be made to meet the needs of all learners.
IMPLEMENTATION	<ul style="list-style-type: none"> ▪ ensure 'teachers have good knowledge of the subject(s) and courses they teach' by; 	providing relevant staff training; monitoring teaching and learning.
	<ul style="list-style-type: none"> ▪ provide 'effective support for those teaching outside their main areas of expertise' by: 	providing relevant staff training; monitoring teaching and learning; opportunities for sharing good practice.

	<ul style="list-style-type: none"> ensure 'teachers present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching' by: 	<p>providing relevant staff training; monitoring teaching and learning; providing appropriate resources.</p>
	<ul style="list-style-type: none"> ensure teachers 'check learners' understanding systematically, identify misconceptions accurately and provide clear, direct feedback' by: 	<p>providing opportunities for formal and informal assessments; using a 'gap analysis' format to ensure misconceptions are identified; ensuring the 'feedback and marking' policy is evidenced.</p>
	<ul style="list-style-type: none"> ensure teachers 'respond and adapt their teaching as necessary, without unnecessarily elaborate of differentiated approaches by: 	<p>equipping teachers with appropriate support and resources; creating a collaborative and consistent approach amongst teaching teams.</p>
	<ul style="list-style-type: none"> ensure 'over the course of study, teaching is designed to help learners to remember in the long term the content they have been and to integrate new knowledge into larger concepts' by: 	<p>providing opportunities for learners to recap prior learning; utilising a variety of techniques to support long term memory acquisition.</p>
IMPLEMENTATION	<ul style="list-style-type: none"> ensure assessment is used well in order to 'help learners embed and use knowledge fluently or to check understanding and inform teaching'. 	<p>providing opportunities for formal and informal assessments; using a 'gap analysis' format to ensure misconceptions are identified; ensuring the 'Feedback and Marking' policy is evidenced.</p>
	<ul style="list-style-type: none"> understand the limitations of assessment and do not use it in a way that creates unnecessary burdens for staff or learners' by: 	<p>ensuring that assessment informs planning through the use of a 'gap analysis'; following the school's assessment cycle.</p>
	<ul style="list-style-type: none"> ensure 'teachers create an environment that allows the learner to focus on learning', by: 	<p>using a CPA (concrete, pictorial and abstract) approach to the teaching of mathematics which will enable children to develop confidence and fluency within all areas of maths.</p>

	<ul style="list-style-type: none"> ▪ ensure 'the resources and materials that teachers select reflect the provider's ambitious intentions for the course of study and clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment' by: 	<p>using a wide range of concrete resources when introducing mathematical concepts to children and ensuring children are provided with a meaningful context and purpose for their learning.</p>
IMPACT	<ul style="list-style-type: none"> ▪ ensure 'learners are ready for the next stage of education, employment or training' by: 	<p>utilising a carefully planned curriculum to equip every learner with the necessary skills and knowledge needed to access and further their learning. Ultimately, ensuring they have been given equal access to the opportunities and tools to become their best selves as they progress into the wider world.</p>
	<ul style="list-style-type: none"> ▪ ensure 'learners develop detailed knowledge and skills across the curriculum and, as a result, achieve well', by 	<p>providing all children with a solid foundation in the key areas of Number, Measure, Geometry and Statistics.</p>

(Quotes taken from the Education Inspection Framework (Ofsted 2019))

- ensure continuity and progression throughout the school;
- devise a subject improvement plan;
- provide guidance and support to all staff;
- provide training for all staff on induction and when the need arises regarding;
- attend appropriate and relevant INSET;
- keep up to date with new developments;
- undertake an annual audit and stock take of resources;
- purchase new resources when required and in preparation for the new academic year;
- manage the subject budget effectively;
- undertake risk assessments when required;
- review and monitor;
- annually report to the Governing Body on the success and development of this policy.

Role of Teachers

Teachers will:

- comply with all aspects of this policy;
- work closely with the subject leader to develop this policy;
- devise medium and short term planning;
- plan and deliver good to outstanding lessons;
- plan differentiated lessons which are interactive, engaging, of a good pace and have a three part structure;
- have high expectations for all children and will provide work that will extend them;
- assess, record and report on the development, progress and attainment of pupils;
- achieve high standards;
- celebrate the success of pupils in lessons
- implement the school's equalities policy and schemes;
- report and deal with all incidents of discrimination;
- attend appropriate training sessions on equality;
- report any concerns they have on any aspect of the school community.

Role of Pupils

Pupils will:

- be aware of and comply with this policy (in an age-appropriate form);
- be encouraged to work in partnership with the school by making decisions and exercising choice in relation to their educational programme;
- listen carefully to all instructions given by the teacher;
- ask for further help if they do not understand;
- participate fully in all lessons;
- participate in discussions concerning progress and attainment;
- treat others, their work and equipment with respect;
- support the school Code of Conduct and guidance necessary to ensure the smooth running of the school;
- liaise with the school council;
- take part in questionnaires and surveys

Role of Parents/Carers

Parents/carers will:

- be aware of and comply with this policy as it applies to them;
- be encouraged to take an active role in the life of the school by attending:
 - parents and open evenings
 - parent-teacher consultations
 - curriculum development workshops
- be encouraged to assist in school as volunteers;
- be encouraged to respond to curriculum information newsletters;
- be informed via termly newsletters of their child's topics;
- asked to provide suggestions and ideas for improving this subject;
- be asked to take part periodic surveys conducted by the school on curriculum development;
- be invited to make presentations to pupils on aspects of this subject area;
- encourage effort and achievement;
- encourage completion of homework and return it to school;

- provide the right conditions for homework to take place;
- expect their child to hand in homework on time;
- join the school in celebrating success of their child's learning.

MONITORING THE EFFECTIVENESS OF THE POLICY

The practical application of this policy will be reviewed annually or when the need arises by the coordinator, the Headteacher and the nominated governor.

A statement of the policy's effectiveness and the necessary recommendations for improvement will be presented to the Governing board for further discussion and endorsement.

LINKED POLICIES

- Academically More Able, Gifted and Talented Pupils
- Assessment
- Calculation Policy
- Curriculum
- Curriculum Intent, Implementation and Impact
- Differentiation
- English as an Additional Language (EAL)
- Monitoring and Evaluation
- Self-Evaluation and School Improvement
- Special Educational Needs
- Teaching and Learning

Confirmation of policy:

Corpus Christi School

Lead member of staff: Sophie Giles

Link Governor: William Mordaunt

Date to be reviewed: September 2022