Maths at Corpus Christi

At Corpus Christi Primary we follow the National Curriculum for mathematics, which aims to ensure that all children:

- 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.

Intent

Our intention is that:

- We want our children to love Maths! We foster a growth mind-set culture and instil the mind-set in every child and staff member that everyone can do maths.
- We do not accept that 'some children cannot do 'maths' or that children should be limited by prior attainment- we believe that if you can't do it, you can't do it **yet.**
- Mistakes are valuable and help us learn.
- We aim to teach the skills to ensure that our children are resilient learners who become life-long mathematicians.
- All pupils are expected to succeed and make progress from their starting points.
- Staff teach the skills needed to succeed in mathematics providing examples of good practice and having high expectations.
- We intend to create a vocabulary rich environment, where talk for maths is a key learning tool for all pupils.
- Skills are embedded within a high-quality mathematics education taught from the earliest age and developed consistently over time through the delivery of an engaging and inspiring curriculum.
- Staff promote children's enjoyment of maths and provide opportunities for them to build a deep, conceptual understanding of maths before applying their knowledge to everyday problems and challenges.

	➢ All pupils become fluent in the fundamentals of maths, 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. (Fluency) ➢ All pupils to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language. (Reasoning) ➢ All pupils to 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. (PS)
Implementation	➢ To ensure consistent coverage, every class from EYFS to Y6 follows the White Rose scheme of learning which is based on the National Curriculum. Lessons may be personalised to address the individual needs and requirements for a class but coverage is maintained. ➢ Teachers are also encouraged to use resources from NRich, ISee Reasoning, Arithmekit and NCETM to support, stretch and challenge all children in their classroom. ➢ EYFS and KS1 staff deliver a Mastering Number Programme through ongoing work with NCETM. ➢ Times tables and fluency skills are embedded using the Ashley Down programme from Year 3 upwards. These are practised on a daily basis. ➢ Staff deliver the maths curriculum with a focus on the concrete, pictorial, abstract approach. By using all three, children can explore, demonstrate and deepen their mathematical learning. Together, these elements help to cement knowledge so that children can truly understand and internalise what they have learnt: ➢ **Concrete** – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing. ➢ **Pictorial** – children build upon this concrete approach by using pictorial representations, which can be used to reason and solve problems. ➢ **Abstract** – with the foundations firmly laid by using the concrete and pictorial methods, the children can move onto an abstract approach, using numbers and key concepts with growing confidence. ➢ Regular and ongoing assessment informs teaching, as well as intervention and preteaching, to support and enable the success of every child. ➢ Summative assessments are completed at the end of each unit and full term; their results form discussions in termly Pupil Progress Meetings.

	➢ All pupils have a front cover for each teaching block and this will be stuck in their books at the beginning of the block. This contains key vocabulary and small steps learning. ➢ All classes from Year 2 upwards undertake an elicitation activity at the beginning of each new teaching block. This will allow the teacher to make a judgement on their starting point and next steps in their learning. ➢ A clear learning progression will be evident in books. This starts with clear modelling steps and instruction for all Fluency, Reasoning and Problem Solving activities ➢ Stem sentences are used to support all pupils in their learning from EYFS through to Year 6 with these being on display for the topic (where required). ➢ Mathematical oracy is encouraged with teacher modelling (I say, We Say, You Say) so pupils develop a wider mathematical vocabulary and understanding of terminology. ➢ The learning outcome for each lesson and unit will be clear. ➢ There is a clear expectation how Maths lessons are organised with an emphasis on the **'I do, We do, You do'** approach. ➢ All classes have a maths display in the classrooms visible for the children. This may contain the learning or small steps for that topic, copies of good examples of work from books, marvellous mistakes, key vocabulary and examples of how to use resources. Relevant resources for the teaching block should be readily available to support all learners. ➢ Each class will have 4 sessions of maths per week. ➢ Through CPD we continuously strive to better ourselves sharing ideas and things that have been particularly effective. We take part in training opportunities and regional networking events. ➢ In order to advance individual children's maths skills in school and at home, we use Numbots, Times Tables Rock Stars and Mathletics.
Impact	➢ Teachers provide high quality maths sessions that are well prepared. ➢ Pupils will know more, remember more and understand more about Maths. ➢ Through discussion and feedback, children talk enthusiastically about their maths lessons and speak about how they love learning about maths. ➢ Children show confidence and believe they can learn about a new maths area and apply the knowledge and skills they already have. ➢ Children demonstrate a quick recall of facts and procedures.

	➢ Pupils use acquired vocabulary in maths lessons. They can articulate their reasoning using mathematical vocabulary. ➢ The flexibility and fluidity to move between different contexts and representations of maths. ➢ Children show a high level of pride in the presentation and understanding of the work. ➢ The chance to develop the ability to recognise relationships and make connections in maths lessons.