

GILLINGSTOOL PRIMARY SCHOOL

Inspire ~ Believe ~ Achieve



MATHEMATICS POLICY

Signed ... *D Llewellyn*

Name: Dave Llewellyn

Chair of Governors

Date: November 2020

Signed *C Carter*

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Headteacher

Date: November 2020

Purpose

At Gillingstool the purpose of our maths curriculum is to teach a rich, balanced and progressive programme of study which allows pupils to develop fluent conceptual understanding and become confident in using maths to reason and problem solve in each area.

Our curriculum aims to use maths to support children in better understanding the mathematical world around them and as such link maths to real life experiences and ensure it is cross curricular and pertinent to the lives of the children of Gillingstool.

Our pupils should:

- have a well-developed sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use known facts to apply to more complex calculations mentally
- calculate accurately and efficiently, both mentally and in writing and paper,
- use a range of calculation strategies
- solve problems and use reasoning skills
- explain their methods and reasoning, using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2d and 3d shapes

Delivery

Pupils are taught using a clear progression in line with age related expectations following the White Rose Scheme of Learning and using these resources in conjunction with other sources such as NCETM, I See Reasoning, I See Problem Solving, NRich, Deepening Understanding and TT Rockstars.

We used a child led approach to challenge whereby pupils take ownership of their learning by self-selecting their level of challenge following a selection of hinge questions and the use of self-assessment.

Pupils are taught using a Concrete, Pictorial, Abstract approach and manipulatives are available in all lessons where needed and used by all pupils when introducing a new concept. The use of 'real story, maths story' is used when appropriate to support pupils in moving from the pictorial to abstract stage.

Lessons are structured by introducing new vocabulary and posing pertinent questions through mathematical talk then a clear modelling process occurs using our 'I do, we do, you do,' teaching approach.

Working walls are built up over a unit with the pupils and always include key mathematical point, modelled examples and steps to success which the children are able to refer back to in order to be successful in their learning.

Mathematical tasks will be carefully matched to children's ability, stage and development providing both opportunity for consolidation and challenge.

Differentiation will be achieved by varying the task, support and outcome.

There will be opportunities for children to learn, develop and use an extensive range of mathematical vocabulary and skills.

Cross curricular and cultural links will be recognised and encouraged to enable children to use the skills acquired in a meaningful way which can in turn, motivate the need for new mathematical skills.

Provision

Pupils are provided with a variety of opportunities to develop and extend their mathematical skills, including:

- Group work
- Paired work
- Whole class teaching
- Individual work including 1:1 enhancements and interventions

Pupils engage in:

- the development of mental strategies
- written methods
- practical work
- investigational work
- problem solving
- mathematical discussion
- consolidation of basic skills and number facts
- maths games and use of ICT

Conclusion

In being exposed to a wide range of mathematical concepts, children at Gillingstool will be encouraged to enjoy mathematics and develop in confidence when using number in their daily activities. An awareness of the use of mathematics in the world beyond the classroom will enable them to tackle the problems they meet and support them in their curiosity, development of investigative skills and creativity.