

Hassocks Infant School Mathematics Policy

Policy Statement

At Hassocks Infant School we believe that mathematics is a fundamental life skill that enables us to make sense of concepts and relationships in the world around us. As such, mathematics should be taught within a relevant and practical setting. The promotion of positive attitudes and the enjoyment and fun of mathematics is key to our approach and as such the use of role play, songs, texts and 'real' problems are fundamental to our teaching.

At Hassocks Infant School Maths is highly creative and we develop children's fluency, reasoning and problem solving to promote their sense of enjoyment and curiosity for the subject.

Mastery in Mathematics at Hassocks Infant School

We believe that all children are capable of achieving high standards in mathematics and therefore are developing our mastery approach.

Mastery in mathematics at Hassocks Infant Schools endeavours to provide all children with the same curriculum content, at the same pace, so they have access to the full curriculum. We focus on developing children's confidence and competence so they develop the maths skills needed for their future by increasing the children's fluency, reasoning and problem solving. Careful planning of questioning and learning promotes deep conceptual and procedural knowledge. Ongoing assessments allow us to quickly support and address the individual needs of pupil.

What we aim for teaching for Mastery to look like at Hassocks Infant School

- **Curriculum design:** The use of The Long Term Plan (yearly overview) ensures the curriculum is designed to allow continuity and transition across all year groups. Each year group is responsible for planning half termly Medium Term Plans that reflects the topics being covered, the children's interests and progression of skills. Short Term Plans, produced weekly, allows fundamental skills to be secured to promote mastery before children move onto the next steps.
- **Lesson and Teaching methods:** To promote mastery we are aware that our role as teachers is to engage all pupils successfully. We aim for all pupils to be working on the same curriculum content and stimulate discussions to strengthen their understanding of mathematical connectivity. We use questioning to increase children's ability to make links and think about the mathematical concepts.

Through our lessons and teaching methods we provide children with the opportunities to: apply the skills and knowledge developed to a range of different contexts, organise their ideas to make connections to other areas, return to aspects of learning after a break and explain their understanding to others.

- **Growth Mindset:** We use our growth mindset principles to promote mastery in mathematics. Using the language of growth mindset in our everyday practise, feedback and questioning develops the resilience and confidence of our pupils which

support their ability to reason and problem solve. We teach and use collaborative learning approaches (through growth mindset learning) to promote mastery further. We understand that to develop mastery the children need to develop their resilience which will increase productivity and determination.

- **Pupil Support and Differentiation:** Questioning and scaffolding is used to support pupils in class and will differ from child to child based on their needs as they work through problems. Children working at a deeper understanding will be challenged through more demanding problems which deepen their knowledge of the same content. The use of formative assessment enables us to identify pupils who may have difficulties and misconceptions with the mathematics learning which is addressed rapidly through individual or small group support during the lesson, or shortly after (as planned by the class teacher).

Teaching and Learning

The organisation of mathematics teaching follows these principles:

- Regular mental maths and counting sessions in KS1 and Foundation Stage.
- Planned focused PSRN sessions in the Foundation Stage.
- Mathematics workshops three to four times a week in KS1.
- Mathematics areas in all year groups with opportunities for mathematical learning and exploration of resources.
- Opportunities for mathematical learning within the outside environment.
- An emphasis on quality first teaching through well planned, active and stimulating lessons that build on prior knowledge.
- Teaching to be practical wherever possible and with reasoning and problem solving embedded in children's learning.
- An emphasis to be placed on the development of precise mathematical vocabulary.
- Encouragement of children's explanations of mathematical thinking wherever possible.
- Encouragement of children's own recordings when appropriate.

Through careful planning and preparation we aim to ensure that throughout the school children are given opportunities for:

- practical activities and mathematical games
- problem solving
- individual, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculating e.g. mental, pen and paper or practical resources
- computing as a mathematical tool

SEN

We promote an inclusive policy in all curriculum areas and children with SEN are taught within the class and their needs are planned for by their class teacher. Where applicable children's ILPs incorporate suitable objectives from the maths curriculum and teachers keep

these objectives in mind when planning work. Support staff may be used to support specific groups or individual children and they work collaboratively with the class teacher. Within the whole class lessons teachers not only provide activities to support children who find mathematics difficult but also activities that provide appropriate challenges for children who are high achievers in mathematics.

Equal Opportunities

We incorporate mathematics into a wide range of cross-curricular subjects and seek to take advantage of cultural aspects of mathematics. All children are given equal opportunities to succeed through careful planning and personalised learning.

Pupils' Records of Work

Children are encouraged from the Foundation Stage and throughout KS1 to record their mathematical findings in a way that is relevant to them. This may be in the form of drawings, mark making and numbers and symbols. As the children move through KS1 their recording becomes more formal although their own methods and jottings are still encouraged and celebrated. Reception children have a workbook covering all areas of the curriculum that serves as a record of progress throughout the year. Observations, photos and annotated work are a record of their learning. KS1 children have a designated mathematics book to record their work. The work is annotated by the adult and marked according to the school policy for marking.

Assessment and Record Keeping

Class teachers and support staff continually assess the mathematics work by the children. Reception teachers follow the assessment procedures for the Foundation Stage and KS1 teachers follow the assessment procedures for KS1. All children are tracked on the school's assessment tool (Target Tracker) on a half termly cycle from Reception through to year 2. Formal testing in year 2 follows national guidance and the completion of SATs.

Reporting to Parents

Parents are informed of their child's progress through formal parent consultations in the Autumn and Spring terms and a written end of year report in the Summer Term. In the Foundation Stage parents are encouraged to share workbooks with their children throughout the year on an informal basis and any achievements at home to be shared with the class teacher through conversation or the 'Achievement Boxes'.

Evidence

Evidence of mathematical learning is to be seen in books, photographs and displays around the school. Further evidence of maths is kept in the subject portfolio.

Parental Involvement

Parents are informed of the mathematical learning in each year group through termly topic chats, paper copies of learning journey, weekly copies of learning, all information is also available on the school website. Parents in KS1 are sent Key Instant Recall Fact sheets each half term. Each year there is a meeting to share current mathematical practise with

parents as well as booklets explaining methods. Parents also have opportunities to take part in whole school maths events e.g. maths challenge week

Monitoring and Evaluation

The maths leader ensures an overview of mathematics teaching in the school through observations of teaching and monitoring of planning and workbooks. The maths leader leads CPD for whole staff through staff meetings and support with individual members of staff and relevant training courses. The maths leader will work with advisory staff when appropriate.

Resources

Each classroom will have a designated mathematics area with relevant resources. A maths display should also be evident in all classrooms reflecting the learning that is happening within the class. Role play / maths areas should have relevant maths resources to facilitate self-initiated learning opportunities. Resources should be clearly labelled for ease of independent use. The outdoor environment should have a wide and varied selection of mathematical resources. Resources are audited regularly by the coordinator.

Updated September 2018

Review September 2019