

# Holy Family Mathematics Policy 2017 - 2018

**We aim to raise Mathematics standards for all pupils, no matter what their age, gender or background.**

## **Planning and Teaching**

At Holy Family, we will plan differentiated and challenging lessons that can include:

- Mental/ Oral starters which allow the opportunity for the practice of the essential skills and knowledge.
- Activities which contain adequate time for paired, group, whole class and independent working, to enable children to practise skills, explore concepts or apply knowledge.
- Regular guided sessions, for all groups of pupils, which are personalised around children's needs, targets and/or gaps in understanding/skills.
- Plenaries and mini-plenaries used for reflection, assessment, tackling misconceptions or reinforcement and/or consolidation of concepts taught.
- 1 active maths lessons per week using the 'Maths of the Day' scheme.

All these elements do not constitute a good lesson on their own. Teachers should adapt lessons to meet the needs of the class, which are identified through effective on-going formative assessment. The teacher's role should be one of facilitation and all pupils should make excellent progress in their lessons.

Staff at Holy Family will ensure that:

- Direct teaching includes a variety of the following elements:
  - Demonstration (showing how to).
  - Explanation (giving examples). Try to set examples in real-life contexts to support understanding.
  - Questioning (challenging understanding).
  - Discussion and evaluation (talking about methods/errors).
  - Direction (taking care, setting out neatly).
- Differentiation allows for pupil choice where possible. Expectations should always be high and all pupils needs catered for, at all levels of achievement, including high attainers.
- When planning, we focus on the learning not just the teaching. Does the lesson planned achieve the learning outcomes expected?
- We follow the Local Authority framework for Mathematics, but adapt this to suit the needs and abilities of our classes. We also use the 'Developing Calculation Cycle' to ensure that basic skills taught are applied in a wide range of contexts, including not only problem solving but reasoning and open investigation.
- The objectives for each year group (as detailed in the new national curriculum) are taught, sequentially and systematically, and the children are fully **grounded** within these.
- We use a variety of teaching and learning approaches, including practical/investigative work, which is structured and fulfils the aim.
- We use concrete materials such as Cuisenaire rods to help develop an understanding of the objectives.
- We share the aim/learning outcome of the lesson/activity with the pupils, either orally or in written form, but not necessarily always at the beginning of the lesson.
- We provide opportunities for children to discuss, critically analyse and problem solve within lessons.
- We have pace and rigour within our lessons but we do allow children adequate thinking time.

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## **Mental Maths**

At Holy Family, we believe:

- It is important that children become confident mental mathematicians. Children should be secure in the age related basic skill expectations for their year groups. Concrete/visual materials should be used to support access for all.

## **Basic Skills**

Teachers will:

- Plan extra sessions 3 times a week that allow the practise and consolidation of key basic skills.

## **Intervention**

A range of interventions can be used to support children working below expectations. LSA's will support small group work and intervention but not always with lower achievers. Ensure all children have an equal opportunity to support. Rapid graspers should be provided with appropriate challenge.

## **Assessment and Target Setting**

- **PIVATS 5 will be used to assess children on the SEND register.** Even though Pivats are used to provide an assessment level, it is still expected that these children will be targeted to make adequate progress, like all other pupils.
- Formative assessment will be used, in every lesson, to inform next day teaching (this can be done through observation and Q&A in a variety of forms).
- Children will develop self assessment and peer assessment skills, to encourage them to be responsible learners.

## **Monitoring**

Monitoring of teaching and learning happens through lesson observations, work scrutinies, pupil voice interviews, and pupil progress reviews.

## **Online Planning and Professional Development Resources:**

<https://www.ncetm.org.uk/>

<http://www.nationalstemcentre.org.uk/stem-in-context/curriculum>