

# Mathematics Policy

Updated September 2017 To be reviewed September 2018

HADRIAN PARK PRIMARY SCHOOL

#### <u>Rationale</u>

At Hadrian Park, we aim to inspire all children to reach their full academic potential. In Mathematics this means ensuring a curriculum that is fully inclusive of all children which:

- Develops children's knowledge and understanding of Mathematical concepts whilst enabling them to practice and apply skills and methods.
- Enables them to think critically and communicate their understanding.
- Gives them opportunities to apply learnt Mathematical skills in different contexts across the curriculum.
- Provides opportunities to develop problem solving skills useful for Maths across the curriculum.
- Develops children's fluency, reasoning and problem solving skills.

We will offer all of our pupils:

- The opportunities to realise their true potential.
- Use all available, relevant data to make the learning experience as individual as possible.
- Focussed support through clear planning, assessment by teachers, peers and self and provide feedback to move learning forwards.
- Support from teaching and support staff where there is most need.
- Focused targets to move their learning forwards.

## Aims and Objectives

Our overall aim is to ensure that <u>all</u> pupils have ongoing opportunities to develop in procedural fluency, problem solving and reasoning. There should be integration of all 3.

We aim for all pupils to be:

- Efficient and confident mathematicians.
- Able to use and apply Maths across the curriculum.
- Able to understand Maths through a process of enquiry and experiment.
- Confident users of a rich mathematical vocabulary.
- Confident in understanding the relevance of special awareness, numeracy in everyday life.
- Confident users of computing where this can be used to enhance their learning experience.

- Make links between previous knowledge, real life experiences and all aspects of maths.
- To provide access to the full curriculum for all pupils, making allowances where needed for those with additional needs.

#### Planning for Mathematics

- Teachers use the North Tyneside curriculum Progression Maps as their Medium term planning, which outlines the areas of Mathematics that will be taught during each term to ensure coverage of the National Curriculum.
- Using the North Tyneside Curriculum Progression Maps, Teachers select the main teaching objectives which best match the age and ability of the group they will teach each term.
- Planning, where possible, should involve real life contexts for Maths, where children are problem solving with a purpose in mind.
- Class teachers should regularly plan for opportunities for children to apply their Maths skills to different problems within Maths lessons and across the curriculum. This will also allow children to revisit, practice and consolidate different areas of Maths and apply them within different contexts.

## <u>Teaching</u>

- Maths learning builds from concrete understanding of concepts where children are manipulating objects. When children are able to see concepts this way, they then need to understand the same concepts represented pictorially. Children are then ready for abstract representations before being able to apply their knowledge to different situations.
- Children should be encouraged at all times to communicate their understanding of Maths so that it clarifies their thoughts.
- Daily Trio Time sessions focus on pupils basic number skills through a 15 minute, whole class counting session.
- Class targets are used to ensure areas where the majority of the class have not grasped a concept, can be revisited and mastered.
- Teachers should provide suitable challenge for all children through teaching directly to specific groups throughout the lesson and delivering master classes when necessary.

<u>Assessment</u>

- Each class teacher will be responsible for the planning, marking, monitoring and feedback to improve the progress of all pupils.
- Pupils are assessed before being taught a new unit in Maths using a pre unit assessment. The objectives are taken from the National Curriculum and focus on fluency, reasoning and problem solving. At the end of the unit the same or a similar style assessment is carried out on pupils. This gives children the opportunity to demonstrate (to themselves and their teacher) what they have learnt, and gives them a strong sense of accomplishment, as inevitable they get more correct the second time.
- Assessment for learning should occur throughout the entire Maths lessons, enabling teachers/teaching assistants to adapt their teaching/input to meet the children's needs.
- Individual targets linked to age and year group expectations will be used to individually monitor pupil's progress. These will be focussed on a particular aspect of Maths identified through marking and assessments.
- Children will be formally assessed in years 2 and 6.
- Accurate data will be entered into the school tracking system every half term, to monitor progress throughout the school.