Aims and Objectives
Mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables children to understand relationships and patterns in both number and space in their everyday lives.

Our objectives in the teaching of mathematics are:

- To provide experiences from which the children derive enjoyment and a fascination with Mathematics.
- To foster an ability to solve problems, by applying skills to a variety of routine and non-routine problems. To reason, to think logically and to work systematically and accurately.
- To sequence learning so that children gain confidence and develop within themselves a security to adventure further.
- To develop a systematic and logical approach to mathematics and a desire to persist in sustained work.
- To equip the children with strategies to enable them to apply mathematics to real and unfamiliar situations within and beyond the classroom.
- To encourage the effective use of Mathematics as a tool in cross-curricular activities.
- To enable children to communicate and receive ideas and information through their understanding of mathematical concepts.
- To develop an appreciation of mathematical pattern and the ability to identify relationships.
- To enable the children to use mathematical knowledge to think creatively and imaginatively.
- To encourage co-operation with others as well as the ability to work independently.

Organisation and Planning
Mathematics is a core subject. We teach the programmes of study for Mathematics from the Primary Curriculum 2014 as the basis for implementing the statutory requirements. We have a termly overview and detailed weekly planning with differentiated activities to target all groups, including challenge.

Our medium-term plans are adapted from the Primary Curriculum 2014 and Early Years Outcomes containing the Statutory Requirements Age Related Expectations. In KS1 we also incorporate elements from the Lancashire and White Rose Hub planning documents to ensure
complete coverage of the strands of Mathematics. The termly overviews give details of the main teaching objectives for each term and define what we teach. They ensure an appropriate balance and distribution of work across each term. These plans are reviewed by the subject leader and informal dialogue will take place with the KS1 leader. Our weekly plans list the specific learning objectives for each lesson, differentiated to the ability of the child. The activities in Mathematics are planned so that they build on the children’s prior learning. Whilst we give children of all abilities the opportunity to develop their skills, knowledge and understanding, we also plan progression so that there is increasing challenge. Weekly plans are evaluated at the weekly year group meeting.

**Teaching and Learning Style**

The children are taught using a wide variety of techniques in various learning styles. Our principal aim is to develop children’s mental fluency, reasoning and problem solving skills, mathematical vocabulary and understanding. During our daily lessons, we encourage children to ask, as well as answer, mathematical questions and explain their thinking. They also use a wide range of concrete materials to support their learning.

**EYFS**

Nursery and Reception Classes have daily practical mathematics sessions using ‘EYFS, Development Matters and ELGs’. They make use of the outdoor learning environment to develop, consolidate and challenge their mathematical thinking.

**Resources - including Computing.**

The school is well resourced and equipment is easily accessible in the Maths Storage Cupboard. These centrally held materials are accessible only to staff. Each classroom has its own basic mathematical resources e.g. Numicon, rulers, number lines, number cards, dice, digit cards, multilink, counters, etc. The children are expected to know the location of these basic classroom resources they may need in the lessons, thus developing their independent learning skills. The Mathematics Leader monitors and checks the computer mathematical resources and updates and extends where possible. The computer resources mainly used are Espresso, Number Plane, Number Train, Number Crew, Bucket & Spade, Number Shark plus carefully selected Internet Sites such as [www.mathszone.co.uk](http://www.mathszone.co.uk) are also accessed by KS1 pupils. Robotic toys are used to promote learning in position and direction. All classrooms are equipped with interactive whiteboards which are always in use during the Mathematics lesson. In Year 2, approx 50% of one lesson each week is held in the ICT suite where pupils access the above mentioned programmes and sites. Year 1 and Year 2 also use Interactive Teaching Programs (ITP’s) and Lancashire interactive games and activities.

**Assessment, Reporting and Recording**

Teachers assess children's work in Mathematics as part of every lesson helping them to adjust their daily plans and matching these closely to the teaching objectives. Written or verbal feedback is given to help guide children's progress. The children know this as 'Next Steps' and recognise that these are crucial in supporting them as they move on in their learning. Children are encouraged to talk about their work and make judgements about how they can improve their own work and what their next steps will be. Formative assessment also informs targeted group work to ensure progression. Use of White Rose Hub, Assertive Mentoring and DFE assessment materials in KS1 highlights strengths and weaknesses in mathematical learning. Gaps in learning are identified and targeted teaching takes place to ensure that children make
progress. Children’s progress is tracked closely (see individual targets in books) and attainment is stored digitally using Target Tracker in EYFS and KS1.

In Key Stage One progress towards the Expected Standard is shared with the children and the parents on the ‘Going for Green’ assessment sheets termly. At the end of Key Stage 1, children are formally assessed by Statutory Tests, which support Teacher Assessments in mathematics. All parents receive an annual report on their child’s progress, including Key Stage One Assessment outcomes, and have the opportunity to meet the teacher to discuss the report. All children regularly receive Mathematics homework which helps inform parents of the type and level of work being done in school.

**Cross-Curricular Links**
Mathematics is seen as part of the school’s commitment to a topic based approach and links with other areas of the curriculum. We feel that this approach will give the pupils a broad, balanced, relevant curriculum and a continuity of experience and skills.

**Mathematics Intervention:**
Children who are working just below the Expected Standard in KS1 and who would benefit from extra support are identified early in the year. Targeted small group/1:1 intervention is put in place to enable these children to catch up. This is a ‘fast response’ approach to intervention which aims to correct any misconceptions/fill gaps from that particular day’s lesson so that the child may move forward in their learning the following day. These groups are therefore ‘fluid’ and the same children may not always need the support. Children who are working below ARE in EYFS are targeted for basic skills support in Mathematics. Towards the end of the year, a similar ‘booster style’ approach to KS1 is taken for those children who are expected to achieve the Early Learning Goal in Number.

**Links to parents extra curricular activities**
Parents are invited into EYFS classes during “Stay and Share Week” in order to play number games with their child. In KS1, parents are invited to ‘Stay and Learn’ where parents take part in their children’s Mathematics lesson. Calculation methods used by the school are shared with the parents along with the Year 1 and 2 targets and end of year expectations.

**Equal Opportunities**
All children will have the opportunity to reach their full potential in Mathematics regardless of gender, race, disability and faiths. Children who are eligible for Pupil Premium Funding will receive necessary support to enable them to make expected or better than expected progress.

Updated May 2018

This policy will be reviewed regularly

Signed Date Headteacher

Signed Date Chair of Governors