Condover Church of England Primary School

Love Each Other and Know We Are Loved

Love Forgiveness Trust

St Edward's Church of England Primary School

Love Each Other and Know We Are Loved

Love Forgiveness Trust

Mathematics Policy

Condover and St Edward's

CE Primary Schools

Last Reviewed: March 2022

Next Review: March 2024

Diocese of Hereford Multi-Academy Trust

Rationale:

At Condover and St Edward's CE Primary we aim to inspire all children to reach their full academic potential. In mathematics this means ensuring a curriculum that is meaningful, contextual and fully inclusive of all children which:

- Develops children's knowledge and understanding of Mathematical concepts whilst enabling them to practice and hone 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 and across the curriculum.
- Gives them opportunities to develop their reasoning skills.

Curriculum aims

This policy is set within the context of the school's vision, aims and policy on teaching and learning. As a result of their learning in mathematics and problem solving across the curriculum children will:

- Be prepared for applying their skills effectively in everyday life situations, in their future learning and in the work place.
- Have the building blocks in place and to provide a solid foundation to lead onto secondary, further and higher education.

Through teaching with a mastery approach, children will learn to understand, visualise and manipulate numbers using a coherent thinking process which spans the breadth of the Maths curriculum.

Planning

- Planning begins from a thorough understanding of children's needs gleaned through effective and rigorous assessment and tracking, combined with high expectations and ambition for all children to achieve.
- Medium term planning will use the Teaching for Mastery approach, in line with National Curriculum objectives.
- Within short term planning, clear success criteria for teaching should be created – demonstrating the progression needed to reach and exceed the objective. This will be done at the discretion of the teacher, who will take the small steps necessary to ensure fluency and understanding of all pupils.
- Where children are working significantly above the objective, greater depth materials will be used to ensure that the knowledge surrounding the objective is deep and varied.
- Planning, where possible, should involve real life contexts for maths, where children are problem solving with a purpose in mind.
- In mixed age-group classes, teachers will choose between one or two objectives for the whole class. This is to ensure that all children have the building blocks they require to move on to the next objective. New teaching segments will follow on from that of the previous year group, using learning from the previous segment to encourage additional progress across the whole class. There may be exceptions to this planning style, for example, if the attainment gaps between the cohorts is significant enough to require more than one objective being taught.

Teaching and Learning

- In the Foundation Stage, children are given the opportunity to develop their understanding of number, measurement, pattern and shape and space through a combination of short, formal teaching as well as a range of Child Initiated Learning opportunities, where there is plenty of scope for exploration. In addition to this, children will be taught to understand number through Number Sense materials.
- Children will spend a significant part of their learning focusing on the number system, specifically, composition and counting. This will provide the solid foundation required for learning in future year groups.
- Maths learning builds from a concrete understanding of concepts where children are manipulating objects. The use of concrete objects for representation will be accompanied by pictorial and abstract teaching in order to ensure that child make connections between the different representations of number.
- Children will use stem sentences to discuss and explain their understanding of a mathematical concept and promoting high standards of spoken language.
- Children's mental maths is of great importance, with number bonds, times tables facts and various strategies for calculation taught and practiced at school with support sought from parents through homework activities.
- A progression towards efficient written calculations should be developed and applied consistently in each year-group. The school Calculation Policy should be followed.
- Assessment for learning, for example achieved through verbal feedback and marking, should be used to ensure areas where the majority of the class have not grasped a concept can be revisited and mastered.
- Though the nature of lessons will be very different depending on the needs of the class, children should be: active; practicing skills they haven't yet mastered (perhaps recapping on previous objectives); learning something new OR learning to apply their knowledge to different contexts. They should be: 'doing' very quickly; working at a good pace and being productive; sharing their thoughts and methods and being successful.
- Using the mastery process, opportunities for problem solving will be provided within lessons at frequent intervals, and will form part of the assessment process for teachers.

Assessment, recording and reporting

- Assessment for learning should occur throughout the entire maths lesson, enabling teachers/teaching assistants to adapt their teaching/input to meet the children's needs. This feedback should be clear and regular.
- On a daily basis, children should self-assess against the learning objective and success criteria, giving them a sense of success. Children should know when they are meeting their targets and be self-assessing against those too.
- Pupil's work should be marked in line with the Marking Policy, giving children a chance to learn from their misconceptions or incorrect methods.
- Future lesson design should depend on class success evaluated through marking and observations made during the lesson.
- Assessment of pupil work and progress is ongoing by the class teacher and informs future planning. Teachers mark work in mathematics in line with the school marking policy. Teachers use segments from the NCETM spines, allowing them to monitor small steps in children's progress in mathematics. Teachers report their assessment in line with the school's assessment policy.
- Summative assessments are made at least twice a year at a time deemed to be of maximum benefit to the pupils.

- Tracking is used in order that children who are not making good progress over time can be targeted for support in one form or another.

Assessments are used to:

- To ensure that individual pupils make progress compared with previous attainment
- Assess pupils' work against the key objective for the year
- Assess pupils' work against national standards at year 2 and 6
- Provide information about children's attainment and progress to assist in reporting to parents
- To assist with planning for progression
- Help us to gain relevant information to set targets and focus on areas of weakness in order to constantly strive for high levels in SATs
- Allow staff and the LAB the opportunity to see the overall progress and attainment made by the school as a whole, including progress towards school, LA and national targets.

All results are to be reviewed by the class teachers against the pupils' daily work. This will serve to check for anomalies in results.

Progress, attainment and next step targets will be reported to parents on a termly basis.
Each pupil's achievement is compared against both national and local standards.

Display and Resources

- Resources are integral to the Teaching for Mastery approach. Therefore, a wide variety of resources, concrete, pictorial and abstract, will always be available to children. Independence to select the appropriate resources will be encouraged, however, teachers will need to use their professional judgment to support each pupil in making progress.
- Mathematical vocabulary should be displayed within the classroom so that children use this in the communication of their understanding.
- There should be maths work on display in classrooms and in other areas of the school in order to encourage a positive attitude and enthusiasm towards mathematics for all groups of children.

Monitoring and Evaluating

Monitoring of children's progress begins with performance review meetings but continues with the subject co-ordinators evaluating further evidence to ensure children are making progress. This monitoring happens through examination of work in books, pupil interviews, analysis of assessment results and the assessments used, and through other means depending on what is information needs to be gleaned.
Following monitoring activities feedback is given to staff about how they can strengthen their practice and CPD (professional development) opportunities built in where it would be deemed valuable. These might take the shape of inputs during staff meetings or by a variety of other means. Subject leaders will support staff by taking part in co-teaching activities during Maths lessons

Role of the co-ordinator

- Take a lead in policy development
- Plan the sequential progression of DT teaching across the school

- Monitor the effectiveness of the teaching of mathematics
- Support colleagues, including induction of teachers new to the school.
- Attend and provide CPD
- Make resources available for a range of purposes. • Liaise with other teaching staff regarding opportunities for children to participate in activities outside school.

Equal Opportunities

We believe that all children have equal rights to all aspects of the school. We aim to actively challenge any examples of inequality or stereotyping especially those based on race, beliefs, culture or sex. In order to ensure pupils with SEND access the mathematics curriculum, teaching staff will provide the appropriate support.