West Winch Primary School

Maths Policy 2018

This policy should be read in conjunction with the school Calculations Policy

Aims and objectives

At West Winch we recognise that mathematics helps children to make sense of the world in which they live. It is used to make sense of and communicate information and ideas. Skills learnt will be used to tackle a wide range of practical and real-life problems. To achieve this aim the children are guided through a carefully structured series of learning experiences, which enables them to develop mathematical knowledge, vocabulary and understanding.

The aims of mathematics are to:

- *develop an enjoyment of mathematics and a sense of achievement*
- *enable each child to achieve high mathematical skills*
- *enable children to reason about mathematics*
- *give them the confidence to be able to apply these skills to solve problems in their everyday life*

In order to achieve these aims we will provide opportunities so that each child may:

- *have a sense of the size of a number and where it fits into the number system*
- *know by heart number facts such as number bonds, multiplication tables, doubles and halves*
- *use what they know by heart to figure out answers mentally*
- *calculate accurately and efficiently, both mentally and with pencil and paper, drawing on a range of calculation strategies*
- *recognise when it is appropriate to use a calculator, and to be able to do so effectively*
- *make sense of number problems, including non-routine problems, and recognise the operations needed to solve them*
- *explain their methods and reasoning using correct mathematical terms*
- *judge whether their answers are reasonable and have strategies for checking them where necessary*
- *suggest suitable units for measuring, and make sensible estimates of measurement*
- *explain and make predictions from the numbers in graphs, diagrams, charts and tables*

Teaching & Learning Style

Our teaching of mathematics is based on the National Curriculum Programmes of Study and the Early Years Foundation Stage (EYFS). We can help our children acquire proficiency by giving a sharp focus to the relevant aspects of the programmes of study for mathematics. We do this through a daily lesson that has a high proportion of whole-class and group teaching. During these lessons children experience a wide range of activities and teaching methods, including those that enable them to reason about, investigate and explore mathematics in a practical way.

Teaching assistants are actively involved with the teaching and learning process and work closely with class teachers to implement effective learning strategies with individuals or small groups. They also lead a range of intervention activities.

Cross-curricular links with mathematics are encouraged across the school in all year groups. The teaching strategies used should involve high-quality direct teaching, which is interactive and lively – with a variety of teaching styles used. Objectives are clearly stated and shared with the class.

Certain skills such as mental calculation, problem solving and investigating are given high priority and this is encouraged by asking open as well as closed questions.

Teaching Maths to children with SEN (Special Educational Needs)

At our school we teach Maths to all children, whatever their ability. Maths forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our Maths teaching we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expectations.

When progress falls significantly outside the expected range, the child may have SEN. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, and differentiation – so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs.

Children may have an IEP (Individual Education Plan) that includes, as appropriate, specific targets relating to Maths.

Maths across other curriculum areas

Maths is embedded into planning across all curriculum areas. Other curriculum areas are always linked to a mathematical focus, and the aim is for mathematics teaching to cover 40% of learning time.

Assessment and recording

Teachers assess children's work in mathematics in three phases. The short-term assessments that teachers make as part of every lesson help teachers to adjust their daily plans. Teachers match these short-term assessments closely to the teaching objectives. They use medium-term assessments to measure progress against the key objectives, and to help them plan for the next unit of work. This is in the form of termly

assessments, which are assessed against the yearly learning objectives. Teachers make long-term assessments towards the end of the school year, and they use these to assess progress against school and national targets. With the help of these long-term assessments, teachers are able to set targets for the next school year and summarize the progress of each child before discussing it with the child's parents. The next teacher also uses these long-term assessments as the basis for planning work for the new school year. These long-term assessments are made using end-of-year tests, termly assessments and teacher assessments. Children undertake the national tests at the end of Year 2 and Year 6, plus assessments at the end of Years 3, 4 and 5. Each half term teacher assessments are fed into our whole school tracking tool – for analysis by senior leaders and teachers.

Monitoring and Review

Monitoring of the standards of the children's work and of the quality of teaching in mathematics is the responsibility of the mathematics subject leader. The work of the subject leader also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The subject leader gives the Headteacher and Governing Body an annual summary report in which s/he evaluates the strengths and weaknesses in the subject, and indicates areas for further improvement. Mathematics management time is given in order to enable the subject leader to review samples of the children's work and undertake lesson observations of mathematics teaching across the school.

Mathematics Policy Adopted: Autumn 2018

Mathematics Policy Review: Autumn 2020

Heather Habbin - Chair of Governing Body