ST PHILIP'S CE PRIMARY SCHOOL

Maths Policy

Policy confirmed by the Governing Body of St Philip's CE Primary School on:

Date: _____

Signature: _____
(Chair of Governors)

This policy is to be reviewed on : in term 5 2010

General Aims:

- To enable pupils to be proficient, competent and confident with numbers and measures, and to have an ability to solve number problems in a variety of contexts.

- To foster positive attitudes towards mathematics by developing pupils confidence, independence, persistence and co-operation skills.

Mathematical language:
Children will be taught, and provided with opportunities, to use the correct mathematical language and notation to discuss their mathematics and explain their thinking.

The approach to calculation:
The approach to calculation adopted is that set out by The National Numeracy Strategy Framework for Teaching and Curriculum Guidance for the Foundation Stage.

Mental mathematics
Mental methods will be emphasised from an early age. Children will be directly taught and provided with regular opportunities to develop the different skills involved. These skills include:

- Remembering number facts
- Using known facts to work out new facts
- Developing a repertoire of mental strategies
- Solving problems
- Weekly magic maths

Written work
Written recordings will be used to:

- Informally support a mental calculation
- Develop the skill of explaining the method used
- Help someone else follow the method or assess the work
- Practise writing and using the correct symbols and notation
- Help remember or practise the recall of number facts
- Carry out the working of a standard written method of calculation

The role of calculators
Calculators will be used in the school for two purposes:

- as a teaching aid in all year groups (including role play and number recognition in Reception)
- as a calculating aid in years 4, 5 and 6. Here children will be directly taught, and given opportunities to develop the technical skills involved along with the correct vocabulary, and also to make decisions about when it best to use a calculator.

Lesson organisation
From year 1 onwards, all pupils will have a daily dedicated mathematics lesson. There will be a good balance between whole-class work, group teaching and individual practice. The overall structure of the lessons will be generally the same:

- oral work and mental calculation (about 5 to 10 minutes). Whole class work to rehearse, sharpen and develop mental and oral skills.
- The main teaching activity (about 30 to 40 minutes). To include teaching input and pupil activities Pupils might work as a whole class, in groups, in pairs or as individuals
- A plenary (about 10 to 15 minutes). Work with the whole class to sort out misconceptions and identify progress, to summarise key facts and ideas and what to remember, to make links to other work and discuss the next steps, and to set work to do at home

Teachers will use their professional judgement to determine the activities, timing and organisation of each part of the lesson to suit its objectives. There will therefore be considerable variety and creativity on different days.
Mathematics teaching for the reception children will develop over the year. The aim is that by the end of the reception year all children are prepared to participate in the daily dedicated mathematics lesson. At the start of the year elements of the lesson might take place at different times of the day, and in different contexts not necessarily when others are doing mathematics (following the Curriculum Guidance for the Foundation Stage).

Mathematics Across the Curriculum
Opportunities will be used to draw mathematical experiences out of a range of activities in other subjects to provide opportunities to apply and use mathematics in real life contexts. Mathematics will also contribute to other subjects in practical ways.

ICT
Children will apply and use mathematics in a variety of ways when they solve problems using a range of ICT equipment (calculator, OHP, Video, Audio, Roamer, camera, video camera etc.). The use of computers in the daily mathematics lesson aims to be to support pupil activities and direct teaching strategies related to the learning objectives for the lesson. Interactive whiteboards can enhance and embed the teaching and learning of mathematics. The ITP's (Interactive Teaching Programmes) are useful for demonstration and modelling of key maths concepts.
Updated programmes are available on the Standards Website, with user guides for each programme. (www.standards.dfes.gov.uk/primary)

Special Needs
The aim is to ensure that all pupils make progress and gain positively from each mathematics lesson. All teachers aim to:

- Plan lessons so that all pupil scan be included.
- Use a range of resources effectively to allow access to whole class or group work
- Differentiate tasks or activities
- Organise the class and deploy staff to support group or individual needs

For children with a special need in mathematics, their targets will be included on the group or individual education plan. These will be taken from the Framework for teaching or P-level targets.

Equal opportunities
It will be ensured that all pupils will have equal access to the full mathematics curriculum. See the school's equal opportunities and Inclusion policies.

Resources
Resources will be stored in individual classrooms. Teachers will use resources to;

- Demonstrate or model an idea, an operation or method of calculation e.g. a number line, large arrow cards, counting stick,
- Enable children to use a calculation strategy or method that they couldn't do without help; e.g. individual number grids or lines, counters, fingers.
- Provide a context for the application and practise of mental calculation strategies and number skills e.g. dice, 0-10 number cards, number games, coins.

The aim will continue to be to develop an approach in which mental methods are always considered first.

Out of class work/homework/parental involvement
Opportunities will be provided for children to practise and consolidate their skills and knowledge, and to develop and extend their techniques and strategies, and to prepare for their future learning through out-of-class activities or homework. This may not always be written work, and it is aimed that it will be frequently given, short and focused. It will be varied, interesting and fun so that the children are motivated, it stimulates their learning and fosters different study skills. Whatever the nature of the work it is aimed that feedback will always be given. See school's homework policy.

Planning and Assessment/marking/record keeping
At each level of assessment should inform future planning.

Long term plans for mathematics will be the yearly teaching programmes set out in the Framework for teaching.

Medium term plans are created by using the objectives from the yearly teaching programme. Medium term assessments will determine the objectives to be selected for each term.

Short term planning will be on a weekly basis and will outline the learning intentions, what the teacher will do, pupil activities and strategies for differentiation for each lesson.

Snap shot, key objectives and abacus assessments will be used each term to assess pupil's progress.

Records of assessments will be kept by teachers and results of formal assessments carried out in October, February and May will be recorded on the Individual Pupil Record and the class overview sheets as a means of tracking pupil progress.