



Beechwood Primary School

Mathematics Policy

‘Mathematics equips pupils with a uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem-solving skills, and the ability to think in abstract ways.

Mathematics is important in everyday life, many forms of employment, science and technology, medicine, the economy, the environment and development, and in public decision-making.

Mathematics is a creative discipline. It can stimulate moments of pleasure and wonder when a pupil solves a problem for the first time, discovers a more elegant solution to that problem or suddenly sees hidden connections.’

Aims

- To enable pupils to be proficient, competent and confident with numbers, measures, the handling of data, and shape and space, and to have an ability to solve mathematical problems in a variety of contexts.
- To foster positive attitudes towards mathematics by developing pupils confidence, independence, persistence and co-operation skills.

Curriculum Planning

All Key Stages to follow Broadbent Maths

Overview plan

- To be completed as a team
- Must be completed every two weeks
- Consider real life opportunities / application of skill / context.
- Agree appropriate vocabulary and language to be explored
- Examples or explanation of models that will be used
- Visual aids and ICT links to also be shared at this point of the planning

Weekly Planning

- Use the skills lists on the overview document to plan the learning objects and outcomes
- Use the assessment for learning questions on the overview plan to form the plenaries.
- Lesson must be progressive and build on children prior knowledge
- The front page of the plan must be complete to show the children prior knowledge, issue arising from the previous week, home learning and the current skills ladder.

Each lesson plan must include

- A learning objective from the skills list

- The resources and models that will be used in the lesson
- ICT links (if applicable)
- Potential misconceptions
- A oral and metal starter
- Input questions and ideas
- Plenary (assessment for learning ideas from overview or testbase style question.)
- TA allocation
- Differentiated activities (Basic, Advancing and Deep)
- The plan may include a second input that is design to extend the higher end of the group.

All planning must be available to the Teaching assistants in advance of the lesson to allow time for questions.

Teaching and Learning

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

- Warm up activities (10 minutes)
- Main teaching activity (30-40 minutes) to include teaching input and pupil activities.
- Plenary (10 minutes) – work with the class to clarify misconceptions, identify progress, to summarise key facts and apply to a testbase question, to make links to other work and discuss the next steps, traffic light work.

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 Foundation Stage will develop over the year. The aim is that by the end of the Foundation Year all children will be participating in the daily dedicated mathematics lesson.

Setting

From Year 1 onwards children are set for maths according to their ability.

In Year 6 a Booster Group is provided for children who are not making the average progress.

Marking and Presentation

Children work in squared books and should write one digit per square. A ruler should always be used to draw straight lines.

The short date is used in Mathematics books.

Work is marked in green pen and a comment is made. Ticks are acceptable to acknowledge correct, accurate work. If a child has made a lot of errors then a maximum of three can be marked with a c to ask the child to correct it and then the rest will be marked with a cross.

The original work should not be rubbed out and a purple pencil or power should be used to make corrections.

Home Learning

Opportunities will be provided for children to practise and consolidate their skills and knowledge, to develop and extend their techniques and strategies, and to prepare for their future learning through out of class activities or home learning. This may not always be written work. Home Learning is set weekly for Years 1 to 6. In Key Stage 1 and 2 home learning is set on a Friday to be handed in the following Tuesday.

Subject Specific Resources

Each class has a set of resources that are specific to their needs; other resources can be found in the Maths Resource Room in labelled boxes.

Differentiation

Differentiation is an essential element of good planning.

During the main part of the lesson careful consideration should be given to those children with SEN and the more able, who need challenge and stimulation.

During the plenary, differentiation and assessment can take place through the use of probing questions. Three carefully asked questions could be targeted to include; the whole class (including the less able);

The following strategies and programmes are also used within school where appropriate: Number Shark and 1stclass@number

Assessment

In the Foundation Stage assessments are made in order to complete the children's profile. Throughout the school year the following assessments are made and recorded:

- Sums up
- Optional Tests in Years 1,3,4 and 5 in May
- End of Key Stage SATs in Years 2 and 6 in May
- Reporting Teacher assessment levels to parents 3 times a year.
- Teacher assessment is recorded on Year Group Tracking Sheets

Equal Opportunities and Inclusion

All staff at Beechwood Primary School are responsible for ensuring that all pupils irrespective of gender, ability, ethnicity, disability and social circumstances; have access to and be given opportunities to make the greatest progress possible while at school.

Able, Gifted and Talented

These children have been identified by staff and placed on the A, G and T register. They receive an individual action plan in order that their skills can be developed. At present the support is given to other pupils in class, in order to properly develop their skills, is usually undertaken by the class teacher who has organised the class groups with this in mind. A Maths Masterclass Club is held for all children on the register once a year.

SEN

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 pupils can be included
- Use a range of resources, including the use of ICT, 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

Health and Safety

When working with equipment, tools or materials pupils should be taught:

- About hazards, risks and risk control
- To recognise hazards, assess consequent risks and take steps to control the risks to themselves and others.
- To manage their environment to ensure health and safety of themselves and others
- To explain the steps they take to control risks e.g. specific storage of equipment

Maths across the Curriculum

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

Monitoring and Evaluation

Subject leaders and Team Leaders monitor weekly plans for coverage and progression. Feedback will be given to individual teachers where appropriate. Subject Leader will carry out a book scrutiny, pupil interviews, lesson observations.

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Reviewed: March 2016

Next Review: March 2018