



Noam Primary School

Mathematics Policy

December 2016

Mathematics

Date	Review Date	Subject Leader	Nominated Governor
3/12/2016	3/12/2017	Mrs Adele Aremband	Mrs Tova Solomon

We believe this policy relates to the following legislation:

- Education Act 1996
- Education Act 1997
- Standards and Framework Act 1998
- Education (National Curriculum) (Temporary Exceptions for Individual Pupils) (England) Regulations 2000
- Education Act 2003

The following documentation is also related to this policy:

- Designing and Timetabling the Primary Curriculum - a practical guide for Key Stage 1 and 2 (Qualifications and Curriculum Authority 2002)
- National curriculum in England: Mathematics programmes of study

We believe mathematics is 'a creative and highly inter-connected discipline which is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.' (The National Curriculum in England Framework Document (DfE) 2014)

We have a duty to ensure compliance with the revised National Curriculum and with the application of the new programmes of study and attainment targets. We understand that 'the National Curriculum provides pupils with an introduction to the core knowledge that they need to be educated citizens.'

We believe it is essential that this policy clearly identifies and outlines the roles and responsibilities of all those involved in the procedures and arrangements that is connected with this policy.

Aims

- To ensure that all pupils become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- To ensure that all pupils reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.

Noam Primary School

- To ensure that all pupils can solve problems by applying their mathematics to a variety of routine and non routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

(The National Curriculum in England Framework Document (DfE) 2014)

- To develop an enthusiasm for and fascination with mathematics.
- To increase the confidence of each pupil in mathematics to enable them to apply the knowledge and skills with assurance.
- To promote the teaching of numeracy within all subjects.
- To share good practice within the school.

Roles and Responsibility for the Policy

Role of the Governing Body

The Governing Body has:

- appointed a member of staff to be responsible for the curriculum leadership of Mathematics;
- delegated powers and responsibilities to the Headteacher to ensure all school staff and stakeholders are aware of and comply with this policy;
- responsibility for ensuring compliance with the legal requirements of the National Curriculum;
- responsibility for ensuring all policies are made available to parents;
- nominated a link governor to visit the school regularly, to liaise with the Headteacher and the coordinator and to report back to the Governing Body;

Role of the Headteacher and Senior Leadership Team

The Headteacher and the Senior Leadership Team will:

- ensure all school staff are aware of and comply with this policy;
- work closely with the subject leader and the link governor;
- ensure compliance with the legal requirements of the National Curriculum;
- consider disapplying a pupil from all or part of the National Curriculum for a period of time if this will benefit the child;
- provide guidance, support and training to all staff;
- monitor the effectiveness of this policy by:
 - observing teaching and learning
 - planning and book scrutinies and learning walks
 - discussions with pupils
- annually report to the Governing Body on the success and development of this policy

Role of the Subject Leader

The Subject Leader will:

- lead the development of this policy throughout the school;
- work closely with the Headteacher, the nominated governor and SENCO;
- be accountable for standards in this subject area;
- monitor standards by;
 - review of the scheme of work
 - monitoring teachers planning
 - lesson observations
 - scrutinising children's work
 - discussions with pupils
- ensure continuity and progression throughout the school;
- devise a subject improvement plan;
- provide guidance and support to all staff;
- provide training for all staff on induction and when the need arises regarding;
- attend appropriate and relevant INSET;
- keep up to date with new developments;
- undertake an annual audit and stock take of resources;
- purchase new resources when required and in preparation for the new academic year;
- review and monitor;

Role of the Nominated Governor

The Nominated Governor will:

- work closely with the Headteacher and the subject leader;
- ensure this policy is up to date;
- ensure that everyone connected with the school is aware of this policy;

Role of Teachers

Teachers will:

- comply with all aspects of this policy;
- work closely with the subject leader to develop this policy;
- devise medium and short term planning;
- develop mathematical fluency, numeracy and mathematical understanding in all subjects;
- develop pupils' spoken language, reading, writing and vocabulary in numeracy;
- plan and deliver good to outstanding lessons;
- plan differentiated lessons which are interactive, engaging, of a good pace and have a three part structure;
- have high expectations for all children and will provide work that will extend them;
- assess, record and report on the development, progress and attainment of pupils;
- achieve high standards;

Noam Primary School

- celebrate the success of pupils in lessons

Role of Pupils

Pupils will:

- listen carefully to all instructions given by the teacher;
- ask for further help if they do not understand;
- participate fully in all lessons;
- participate in discussions concerning progress and attainment;
- treat others, their work and equipment with respect;
- support the school Code of Conduct and guidance necessary to ensure the smooth running of the school;

Role of Parents/Carers

Parents/carers will:

- be aware of and comply with this policy;
- be encouraged to take an active role in the life of the school by attending:
 - parents and open evenings
 - parent-teacher consultations
 - curriculum development workshops
- be encouraged to respond to curriculum information newsletter;
- be informed via termly newsletters of their child's topics;
- encourage effort and achievement;
- encourage completion of homework and return it to school;
- provide the right conditions for homework to take place;
- expect their child to hand in homework on time;
- join the school in celebrating success of their child's learning;

Policy Procedure

Teaching and Learning Style

We use a variety of teaching and learning styles in order to develop children's knowledge, skills and understanding.

Curriculum Planning and Organisation

Teachers collaborate on the planning of the subject to ensure parity in provision and to share expertise. Curriculum planning is managed in three phases namely:

Long Term Planning (Learning Ladders)

- details what is to be taught over the year
- provides teaching guidelines and overall objectives for each year group for the whole year

Medium Term Planning

- organises the subject into termly or half-termly sections
- is more detailed and the objectives are more specific in nature
- is developed by the teachers, who respond to the needs of their pupils
- ensures a balanced distribution of work is undertaken across each term

Short Term Planning

- details the subject curriculum over the week
- plans lessons in detail with specific class objectives
- sets individual learning goals for each pupil

Links with ICT

The use of information and communication technology will promote, enhance and support the teaching of this subject area. However, calculators 'will not be used as a substitute for good written and mental arithmetic but will be 'introduced near the end of KS2 to support pupils' conceptual understanding and exploration of more complex number problems, if written and mental arithmetic are secure.'

We recognise that within the school we have more able, gifted and talented children. We believe that:

- more able children demonstrate a higher ability than average for the class and often require differentiated tasks and opportunities to learn through challenges;
- gifted children are those who have the ability to do well in more than one subject;
- talented children demonstrate an innate talent or skill in creative, cultural or sporting fields

We have an even greater obligation to plan and deliver well-structured lessons with appropriate assessment plus ambitious targets for pupils who have low levels of prior attainment.

Differentiation

Differentiation is best defined as 'the process by which differences between learners are accommodated so that all students in a group have the best possible chance of learning.'
(Geoff Petty)

The main purpose of differentiation is to challenge and raise standards of learning by ensuring that curriculum objectives are accessible to all our children despite their backgrounds or abilities. We see differentiation as a form of integration and not exclusion.

Differentiation must reflect the learning objective and can be achieved in a variety of ways either by task, by support or by outcome and should be chosen by fitness for purpose.

Noam Primary School

We want all children to achieve success, therefore we will ensure they are given differentiated tasks that are matched to their level of attainment so that they can demonstrate successfully what they know, understand and can do. We also support their learning through intervention sessions weekly.

The main feature of effective differentiation is good planning resulting in effective teaching and learning with children making good progress. Also we expect to see in all classes interested well motivated children responding to challenges, children working productively on task and being aware of their own progression.

Special Educational Needs

We want pupils with identified special educational needs to have full access to all subjects of the National Curriculum with teachers planning lessons that have no barriers to pupils achieving and with appropriate targets relating to the subject.

Assessment for Learning

Teachers will:

- carry out continuous assessment;
- use short-term assessments matched to the teaching objectives to adjust their planning;
- make comments in pupil's books related to the teaching objective;
- carry out medium-term assessments to measure progress against ladder objectives to adjust planning;
- carry out long-term assessment to assess progress against school and national targets;
- administer national tests and assessment in Y2 and Y6;
- carry out regularly tests and assessments and especially at the end of Y3, Y4 and Y5;
- use long-term assessments to help them plan for the next academic year;
- inform parents and carers of their child's progress and targets

Monitoring & Review of the Subject

Monitoring of standards of children's work and the quality of teaching is the responsibility of the subject coordinator supported by the Headteacher and the Senior Leadership Team.

Standards will be monitored by:

- looking at pupils work
- subject observations
- pupil discussions
- scrutiny of planning
- general curriculum discussions

Contribution of the Subject to other Areas of the Curriculum

Mathematics contributes to many subjects within the primary curriculum and opportunities will be sought to draw mathematical experience out of a wide range of activities. This will allow children to begin to use and apply mathematics in real contexts.

Resources

The school has some resources to support the teaching of this subject throughout all year groups. Resources are upgraded and replenished when the need arises. An annual stock take and audit is undertaken by the subject coordinator in the summer term in preparation for the next academic year.

Raising Awareness of this Policy

We will raise awareness of this policy via:

- the school website
- meetings with school staff

Training

All school staff:

- have equal chances of training, career development and promotion
- receive training on this policy on induction which specifically covers:
 - National Curriculum programmes of study and attainment targets for all subjects
 - teaching and learning
 - planning
 - assessment
 - key skills
- receive periodic training so that they are kept up to date with new information

Monitoring the Effectiveness of the Policy

The practical application of this policy will be reviewed annually or when the need arises by the coordinator, the Headteacher and the nominated governor.

Headteacher:		Date:	
Chair of Governing Body:		Date:	