



Alderman Pounder Infant and Nursery School

Mathematics Policy

This policy incorporates the following former policy:

- Numeracy

Document Owner: Mathematics Subject Leaders

Issue Date: Spring 2017

Version: 1.3

Review frequency: Every 2 years

REVISION HISTORY

| Version | Revision Date | Next review due | Summary of Changes (and author) |
|---------|---------------|-----------------|---|
| 1.0 | Autumn 2013 | Autumn 2014 | Policy incorporated (Julie Hemsley) |
| 1.1 | Spring 2016 | Spring 2017 | Updated in light of Assessment without levels |
| 1.2 | Autumn 2016 | Spring 2017 | Updated to incorporate aspects of curriculum policy (subject leaders) |
| 1.3 | Spring 2017 | Spring 2019 | Minor changes (J Shelton) |

Statement of Intent

Mathematics at Alderman Pounder Infant and Nursery School is engaging, creative and tailored to individual needs, interests and aptitudes, to ensure all children fulfil their potential.

We strive to develop in our pupils:

- a positive attitude to maths as an interesting, useful and attractive subject
- a high level of numeracy
- an ability to think clearly, logically and creatively in mathematics with confidence, independence and flexibility of mind
- an awareness of the usefulness of mathematics in the world beyond the classroom
- an understanding of mathematics through a process of problem solving, enquiry and investigate
- an understanding of the nature and purposes of mathematics
- an appreciation of the importance of sharing mathematics by discussing, explaining and reporting
- an awareness of the personal qualities, such as perseverance, when working

Aims

Our aims in teaching mathematics are that all children will:

- enjoy the subject and study it with confidence and a sense of achievement
- achieve a high standard in numeracy and a range of other mathematical skills
- apply these skills with confidence and understanding when solving problems

Delivery

❖ Foundation Stage

Children in the FS1 and FS2 classes are provided with planned activities that provide for mathematical experiences both with a teacher and independently. Assessments are made against the Early Learning Goals. Reception children who have attained the ELGs may then be provided with opportunities to access the National Curriculum objectives.

❖ Key Stage 1

In Year 1 and Year 2 mathematics is a core subject which is taught in discrete lessons and whenever possible in a cross curricular creative way. Where appropriate and practical, mathematics will form part of the curriculum enrichment, as well as collaborative events such as Governors' Days, Great Bake Off challenges and Calculating Crow challenges.

Lessons are differentiated to cater for all needs, through personalised learning. To ensure progression we teach in compliance with the National Curriculum 2014.

The Approach to Calculation

The ability to recall facts is essential in the development of mathematical skills. Children should be taught strategies to assist in this and be encouraged to acquire factual knowledge from the outset.

Talking about their work is essential if children are to extend their numeracy skills. They should be provided with opportunities to explain their thinking and always encouraged to use the correct mathematical vocabulary. Questions should be targeted at specific

children or groups to enable them to practice recall of facts and to apply their mathematical understanding to derive new facts.

Inclusion

Teachers plan to meet the needs of all pupils by ensuring learning is focused on individual needs and abilities. Outcomes from assessment of learning enable teachers to set targets which reflect individual pupils' skills, abilities and potential.

The school has developed numerous programmes of intervention for children needing additional support.

❖ **Special Educational Needs**

Children who are experiencing difficulties with maths are identified to the SEN co-ordinator. Appropriate individual support programmes are set up by the SENCo and the class teacher and are recorded on an Individual Education Plan. Children who demonstrate particular ability in mathematics have additional targets set.

❖ **English as an Additional Language**

Children for whom English is an Additional Language may be able to work on formal mathematics but may well have particular difficulties with the language of numeracy and its abstract concepts. Specific materials for EAL children have been devised, to be used as needed.

Recording

Across the school children record their work in a variety of forms; through arts and crafts, in jotters, on work sheets, photos, video and on white boards. Mental work does not exclude a written record of methods or results. It should be noted that jottings and rough workings do not need to be set out with the same formality as standard written methods. However, children are always encouraged to form numerals correctly and legibly and reversals are always pointed out.

Assessment

- ❖ **Formative assessment** is used to guide the progress of individual pupils in mathematics. It involves identifying each child's progress in each aspect of the subject, determining what each child has learned and what therefore should be the next stage in their learning. Formative assessment is mostly carried out informally by teachers in the course of their teaching.

Suitable tasks for assessment include:

- small group discussions, perhaps in the context of a practical task
 - specific assignments for individual pupils
 - individual discussions in which children are encouraged to appraise their own work and progress
- ❖ **Summative assessment** is carried out at the end of National Curriculum Key Stage 1 (i.e. in Year 2) through teacher assessment and SATs.

In Foundation Stage, following the Early Years Statutory Framework:

Emerging (below age related expectations – Early Learning Goal)

Expected (at age related expectations – Early Learning Goal)

Exceeding the Early Learning Goal

❖ **Assessment without levels**

In KS1, the *Interim Teacher Assessment Frameworks* are used to assess children at the end of Key Stage 1:

- working below age related expectations
- working towards age related expectations
- working at age related expectations
- working at greater depth within the expected standard

Reporting

All work carried out by the children is monitored and evaluated. Reporting to parents is done termly through consultations and annually through a written report.

Reporting in mathematics will focus on each child's:

- attitude to mathematics
- competence in basic skills
- ability to apply mathematical knowledge to new situations

Partnership with Parents

We value the support of all our parents and appreciate the role they have in helping their child further develop their mathematical skills outside of school. To this end we offer a Marvellous Maths information evening in the autumn term. This is designed for all parents, from those with children in nursery through to year 2, to help them appreciate 'maths in the home and community'. Practical advice is given to support learning at home, along with information booklets about the curriculum and strategies used in school to support mathematical learning.