

**St Andrews Primary School**  
**Numeracy and Mathematics Policy**  
**2016**

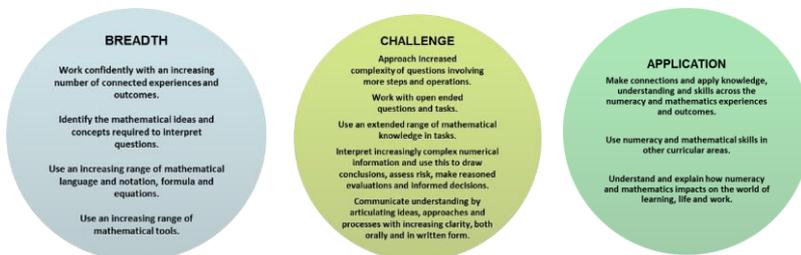
**1. Rationale**

Numeracy is a skill for life, learning and work. Being numerate helps us to function responsibly in everyday life and contribute effectively to society. Mathematics is a life skill which permeates and supports all learning across the curriculum and in future in the world of work.

**2. Aims**

Learning through numeracy and mathematics at St Andrews Primary School enables children to confidently and competently:

- Develop Numeracy skills which ensure children will fully participate in society.
- Apply learning in a variety of contexts to solve problems.
- Access, interpret and analyse numerical information.
- Make informed decisions based on calculations.
- Weigh up different options and decide which options are best.
- Develop financial awareness and effective money management.
- Develop an understanding of shape and space.
- Use technology to enhance skills and concepts.



### **3. Teaching and Learning**

At St Andrews Primary School teachers will plan to provide a range of stimulating activities, working within a rich, inspiring learning environment. Teachers will ensure that the planned learning will challenge, motivate and actively engage all children. As well as the structured progressions of work in place, teachers will recognise that children will encounter a variety of numerical experiences in day to day life and learning in the classroom, across the curriculum. This will provide children with learning experiences to apply their mathematical skills, understanding and thinking in real contexts.

A variety of approaches will be implemented when applying Curriculum for Excellence Learning Outcomes in practice:

- Planned active learning which provides opportunities to observe, explore, investigate, experiment, play, discuss and reflect.
- Developing problem solving skills.
- Developing mental agility capabilities.
- Using quality questioning to encourage children to explain their thinking.
- Building on 'Assessment is For Learning' approaches in lessons.
- Providing opportunities for collaborative learning as well as independent work.
- Programmes of work will provide progression of key concepts which teachers will plan to revisit and consolidate.
- Provide opportunities for children to apply their learning in new and real contexts.
- Using technology to enhance learning.
- Providing activities that are motivating for children which will help them develop a positive attitude towards maths.

- Understand that learning has no ceilings, ensuring that children are challenged to achieve a higher level of attainment in maths.

All programmes of work are located on our school network in staff share in the NUMERACY AND MATHEMATICS folder. The planning formats are also kept in each staffroom along with the corresponding worksheets. Formats and ideas for active learning are also shared on the network. There is a trolley in the infant department where Big Mat Games are stored. The progressions of work are organised as follows:

EARLY LEVEL	Beginning	E.1
	Middle	E.2
	End	E.3
FIRST LEVEL	Beginning	1.1
		1.2
	Middle	1.3
		1.4
		1.5
	End	1.6
		1.7
		1.8
SECOND LEVEL		2.1
		2.2

Teachers should plan to cover three units in one school session for most children to ensure a steady pace of learning. It should be noted that some children will achieve less and some children will achieve more. Learning will have no ceilings to ensure that children are challenged and are given opportunities to progress at an aspirational pace. At the beginning of each term teachers should highlight the

work expected to be covered by each group on a termly basis. The work should be highlighted as follows:

TERM 1 YELLOW

TERM 2 GREEN

TERM 3 BLUE

For each unit of work, the planning formats show the learning outcomes that are covered, the learning intentions, learning activities and active learning resources and activities. Please note that core learning activities are highlighted in **bold**. This is work that should be completed by all pupils. Any other work should be done at the discretion of the teacher according to the learning needs of the child. When the work is completed, it should be ticked. There is a comment for Assessment where the teacher should note the results of assessments done and the work should be evaluated. The results of which will inform the planning for subsequent work.

Teachers also require to include plans for Big Maths ( see folders in staffroom) and problem solving progression of skills ( see folders in staffroom)

### Big Maths

Big Maths is the framework we use at St Andrews to teach the basic skills of Maths from P1-P7. It is based on the principle that if we want children to use and apply their Numeracy skills successfully, we need to ensure that core numeracy skills are embedded first. The framework is organised into 4 areas, namely, Counting, Learn Its, It's Nothing New and Calculation- (C L I C). The system is based on children working through a series of carefully planned sequence of steps called progress drives. Progress drives can be used to plan, to teach, to track, to share and to assess children's learning in maths. Big Maths is planned using the 'CLIC on your Planning' document alongside 'My CLIC Book'. The planning shows which aspects of CLIC to teach each year and each term as the child progresses through the school. It is a description of the minimum

learning journey for the basic skills for mathematics. It should be noted that some children will be on track; others ahead of track. For some children learning gaps will be identified, which will need to be 'plugged' to get their learning back on track. Children may need to be grouped accordingly.

Each class will plan to have a daily 20 minute CLIC Session (5 minutes in each area), although this will be flexible depending on the learners' needs. In addition, the children will have a weekly CLIC test and a Big Maths Beat That test to track children's progress. It is advisable to have a CLIC display in class exhibiting the facts pupils are working on.

### Problem Solving

Problem solving will be at the heart of all learning and teaching. As well as our progression of problem solving skills for each year group, effective teaching should incorporate problem solving approaches in day to day learning and teaching. In numeracy and mathematics activities, we will encourage children to: investigate and explore; ask questions and explore alternative solutions to enhance mathematical thinking and extend and strengthen understanding of key concepts.

### Homelink

Homelink homework is used starting at First Level 1.4 to support work completed in class. Plans are available on school network.

## **4. Assessment and Monitoring**

### Assessment

Assessment in Mathematics and Numeracy at St Andrews Primary School will focus on:

- Developing key Numeracy and Mathematical skills

- Applying their skills in their learning, in their daily lives and in preparing for the world of work

Assessment tasks will be important in assessing progress at key points in their learning e.g. when checking that key concepts are fully embedded and at key points in the school progression such as the end of a unit. Assessment activities are incorporated into our programmes of work. The assessment activities are also kept in the staff folders in each staffroom. Each child has an assessment record showing results of assessment as they progress through the levels, where scores and comments are noted. This information is passed on at times of transition to the next teacher.

Additionally, our assessment procedures identify the extent to which children can apply their skills in their learning and demonstrate their competence and confidence in applying skills and concepts. Teachers and pupils will make good use of assessment as part of day to day learning. Primary 1-3 keep daily Assessment logs to note assessment comments.

### Monitoring

Teaching and learning will be monitored within the school monitoring process to ensure quality teaching and learning. The SMT will observe progress, curriculum coverage and the variety of learning opportunities when monitoring term plans and daily plans.

### 5. Mathematics Across The Curriculum

Teachers will plan to provide opportunities to develop mathematical concepts across the curriculum. This will provide contexts to enhance critical thinking and problem solving skills by applying learning in a range of contexts. This will be shown in project plans.

## **6.Rights of the child**

Our Mathematics and Numeracy policy recognises the following:

All children have the right to an education. **Article 28**

The purpose of education is to develop every child's personality, talents and mental and physical abilities. **Article 29**

Education should prepare children to live responsibly and peacefully in a free society. **Article 29**

All children have the right to relax and play, and to join a wide range of activities. **Article 31**

Unicef.org.uk -Rights Respecting Schools

## **7.Involvement with Stake holders**

Pupils are given homework to support their learning in maths. Parents are kept informed about these tasks through homework diaries and letters home. The homework diaries provide a two communication between home and school. Parents are invited into school on open day to view children's work and also to attend parent workshops.

## **8.Agreement and Review**

This policy was shared with school staff February 2016 as well as SASA committee. This policy will be reviewed and updated as

stated in St Andrews School Development Plan in Session 2016/2017  
as agreed by staff.