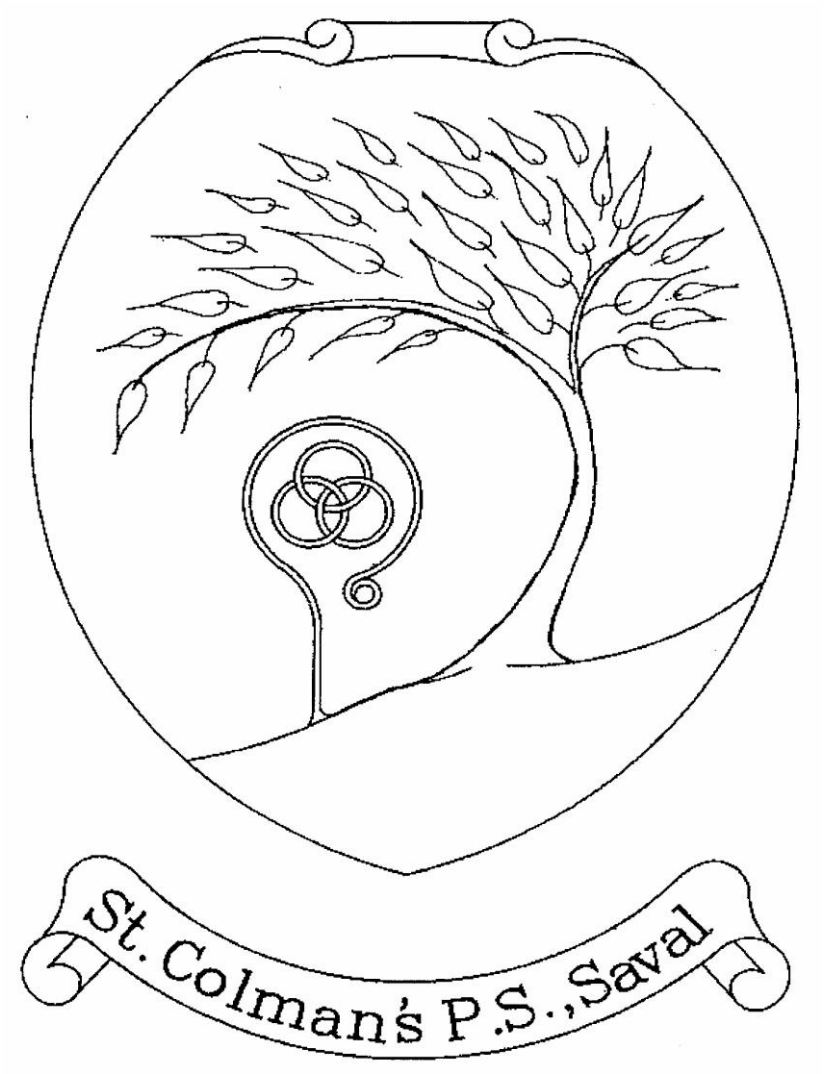

"To enhance each talent.
To meet each need".

NUMERACY & MATHS POLICY

WHAT IS NUMERACY ?

- Numeracy means knowing about number and number operations.
- More than this, it requires an ability and inclination to solve numerical problems, including those involving money or measures.
- It also demands familiarity with the ways in which numerical information is gathered by counting and measuring and is presented in graphs, charts and tables.
- It relates to a sense of shape and movement.
- As teachers we will help the children acquire proficiency by giving a sharp focus to the relevant aspects of the programmes of study for mathematics.
- The outcome should be numerate children who are confident enough to tackle mathematical problems.

The term numeracy brings with it connotations of real-life applications, life skills and a key curriculum skill.

AIMS OF PROMOTING NUMERACY

St Colman's PS aims to develop in each child:

- A positive attitude towards Numeracy, to enable them to reach their full potential in the subject.
- An ability to think clearly, logically and confidently.
- An appreciation of Processes, Number, Algebra, Shape and Space, Measures and Data Handling.
- An ability to identify patterns and relationships.
- An enjoyment of mental maths.
- An ability to use a variety of strategies in coping with mental maths and problem-solving.
- Mathematical skills, knowledge and understanding as well as a quick recall of basic facts.
- An awareness that Numeracy is in the real world-all about us and to prepare them to take their place in society.
- Good methodical work habits.
- Confidence to express ideas fluently and to use mathematical terms and language correctly.
- Confidence to use ICT in Mathematics.

MONITORING AND EVALUATION

Teachers at St Colman's Saval will monitor their effectiveness in promoting numeracy by adopting appropriate measures, setting targets and evaluating the outcomes on an annual basis.
We intend to review our annual targets in relation to levels of attainment in Mathematics at the end of Key Stage One and Key Stage Two .
Children also help appraise our teaching by the quality of their involvement, their response, and attitude to Numeracy and enjoyment of their work.

ROLE OF THE TEACHER IN NUMERACY

- Teachers create a purposeful and motivating learning environment in which the contributions of all children are valued.
- Teachers make use of a range of teaching approaches to take account of differences in children's learning styles.
- Teachers make appropriate use of ICT to enhance learning.
- Teachers' planning takes account of progression and continuity in a way that allows for systematic development of skills and concepts.
- Opportunities for Numeracy development are provided in a planned way across the curriculum
- Opportunities for Numeracy development are incorporated with Numeracy strategy training.

ROLE OF CHILDREN IN NUMERACY

- Children engage readily with mathematical activities in the classroom.
- Children demonstrate increasing confidence in thinking through and articulating solutions to mathematical challenges in co-operation with others when appropriate.
- Children can apply their mathematical skill in a range of contexts within mathematics and across other areas of the curriculum.
- Children are making appropriate progress in Numeracy commensurate with their abilities.
- Children show initiative and confidence in using ICT resources effectively to support their learning.

TEACHING STRATEGIES

1. Teachers create an appropriate learning environment and employ a range of teaching strategies matched to children's needs.
2. During each lesson the teacher will aim to spend as much time as possible in direct teaching and questioning of the whole class, a group of children or individuals. The children are expected to play an active part by answering questions, contributing points to discussion and explaining and demonstrating their methods to the class.
3. A practical approach will be developed and applied in the teaching of Numeracy throughout the school.
4. There will be language development through discussion at all levels. The teacher will question in ways, which match the direction and pace of the lesson and ensure that all children take part.
5. A wide variety of mathematical concepts will be developed through 'Learning through Play in the Foundation Stage'.
6. Much of the children's Mathematics programme will be developed and applied through various aspects of the curriculum and everyday experiences of the classroom, the home and the world around them.

PROCESSES IN MATHS

1. Children will have the opportunity to become independent thinkers and learners.
2. They will build up confidence in their own ability.
3. They will develop a deeper understanding of mathematical concepts.
4. They will develop their capabilities for logical thinking.
5. They will choose appropriate resources.
6. They will develop their skills in processes through practical tasks, real life problems and investigations.
7. They will represent and record their work reflecting their own level description.

MATHEMATICAL PROCESSES
LEVEL DESCRIPTORS:

LEVEL 1 (PRIMARY 1 & 2)
Children use materials provided under direction. They use mathematics as an integral part of classroom activities. They talk about their work in response to questions. They represent their work with objects or pictures. They begin to make simple predictions.

LEVEL 2 (PRIMARY 2 & 3)
Children select, with help, the materials and mathematics required for some classroom activities. They talk about their work, using appropriate mathematical language and represent their work, using symbols and simple diagrams.
They respond to open-ended questions.

LEVEL 3 (PRIMARY 4 & 5)
Children select and use the materials and mathematics appropriate for their work. They find ways to overcome difficulties that arise when they are solving problems. They begin to organise their work and work systematically. They use and interpret mathematical symbols and diagrams. They represent their work in a variety of ways and check it themselves. They discuss their mathematics and begin to explain their thinking.

LEVEL 4 (PRIMARY 5 & 6)
Children gather information required for a task. They begin to develop and use their own strategies for solving problems. They discuss their work and compare their ideas and methods with others. They present information and results in a clear and organised way, explaining the reasons for their choice of presentation. They understand general statements and investigate whether or not particular cases match them.

LEVEL 5 (PRIMARY 7)
Children identify and obtain information required to carry through tasks and solve mathematical problems. They explain their approach to the task. They present their work using symbols, words and diagrams. They check their results and consider whether these are reasonable. They make general statements based on evidence and give an explanation of their reasoning.

CROSS-CURRICULAR THEMES

We aim to incorporate Maths in a wide range of contexts throughout the curriculum.

LANGUAGE & LITERACY

Numeracy lessons can help develop and support children's literacy skills:
For example by teaching Mathematical vocabulary and technical terms, by asking children to read and interpret problems to identify the Mathematical content and by encouraging them to explain and present their conclusions to others.

THE ARTS (ART AND DESIGN, DRAMA AND MUSIC)

Measurements are often needed in art, design, drama and music. Many patterns are based on spatial ideas and properties of shapes, including symmetry. Also counting, time movement position and direction are used extensively in music and drama.

THE WORLD AROUND US (GEOGRAPHY, HISTORY, SCIENCE AND TECHNOLOGY)

In History and Geography children will collect data by counting and measuring and make use of measurements of many kinds. Older children require understanding of the passage of time, which can be illustrated on a time line.

Science and Technology require experiment and one or more of the Mathematical skills of classifying, counting, measuring, calculating, estimating and recording in tables and graphs. ICT can play a very important role in this process also.

PHYSICAL EDUCATION

Athletic activities require measurement of height, distance and time while ideas of counting, movement, position and direction are used extensively in P E gymnastics and ball games.

HOMEWORK

Any Maths homework will be used as a form of revision, consolidating work done in class. It will be short and meaningful. Homework will also reflect mental maths strategies.

Homework will provide a link between school and home with regard to the child's schoolwork, allowing parents to become involved in their child's Numeracy development.

Whatever work is set, the children will be given feedback to show them their work is important and their efforts are valued.

CONTINUITY AND PROGRESSION

We aim, in St Colman's to incorporate progression throughout. There will be liaison within the school from class to class and from teacher to teacher, to ensure continuity and progression.

When planning lessons teachers will give some thought to what children have already been taught so that they can build on concepts, knowledge and skills they have already acquired. They will use opportunities in other subjects to introduce or reinforce mathematical ideas.

ASSESSMENT

Teachers will be continually monitoring the progress of individual children to guide and evaluate learning. Assessment will be undertaken essentially through normal classroom activity during which teachers will absorb and react to children's responses, see whether they need extension work or more help. Occasionally the children will be given short, informal tests of rapid recall of number facts and mental calculations.

Towards the end of the school year, the class teacher, using the NFER Maths Test corresponding to their year, will assess all children from P3 to P7 in

Maths. The age-standardised scores, which result from these tests, will be recorded on the computer system. These scores will help monitor whether children individually and collectively are attaining at, below or above the "national average" score of 100 and how their attainment compares with their attainment in the previous year.

Teachers of P4 and P7 will assess them in May, using Assessment Units supplied by CEA. The teacher will mark these, to help him/her arrive at a judgement of the level at which each child is working. The results of the teacher's assessment will be forwarded to CEA.

CHILDREN WITH SPECIAL NEEDS

Every child is special and has some mathematical talent.

Our aim is to identify and nurture that talent.

Children with Special Needs require individual help, much patience and repetition and a carefully structured programme of work.

CLASSROOM MANAGEMENT

Each child will be encouraged to fetch, utilise and return resources at the end of a task.

A healthy controlled work noise level will be permitted, as discussion is often an integral part of problem solving.

This Policy has been reviewed, amended and updated with the Staff on:

Principal_____

Chairperson of the Board of Governors _____