ST MARY'S PRIMARY SCHOOL
MAGHERY

MATHEMATICS AND NUMERACY POLICY

St Mary's Primary School
Mathematics & Numeracy Policy

Definition of Mathematics and Numeracy

In St. Mary's Primary School, we have decided to adopt the following definition of Numeracy.

"Numeracy means knowing about number and number operations. More than this it requires an ability and inclination to solve numerical problems, including involving money or measures, 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".

The term Numeracy brings with it connotations of real life applications and the use of Mathematics as a natural tool across the curriculum.

Thus Numeracy is both a key skill within school, and a life skill to be utilised throughout every person's day to day experiences.

We see the term "Mathematics "as being synonymous with the term Numeracy throughout our school.

Mission statement for Mathematics and Numeracy

"In St. Mary's Primary School we value every pupil and the contribution they have to make. As a result, we aim to ensure that every child achieves success and that all are enabled to develop their skills in accordance with their level of ability."
This is in line with the overarching vision for the Department of Education:
"To ensure that every learner fulfils his or her full potential at each stage of development."

Purpose of Policy

The purposes of this Policy are:

- To promote a high standard of excellence and consistency of approach amongst all staff

- To communicate the main features of the teaching and learning of Mathematics and Numeracy in our school

- To form a reference document for all staff members

Its intended audience is:

- staff members

- Members of the Board of Governors

- Existing and prospective parents

- Any other stakeholders and educational partners

In order to meet, and to continue to meet these purposes, the Policy will be regularly reviewed and updated.

Guidance materials used

Whilst this Policy document is the result of extended discussion amongst all staff, due consideration was given to externally produced guidance materials, specifically:

- Every School a Good School- a policy for school improvement (DE 2009)

- Better Numeracy in Primary Schools (E.T.I. 2010)

These helped define an agreed framework within which our Numeracy Policy was developed.

Every School a Good School

This document provides a range of indicators of effective practice, in a whole school context. As such they are not necessarily specific to Numeracy, but provide a context in which all teaching and learning, including that in Numeracy, takes place. These indicators are grouped under four characteristics - Child Centred Provision, High Quality Teaching and Learning, Effective Leadership and A School Connected to its Local Community. Our staff has agreed the following indicators are most relevant to Numeracy development in our school:

Child - Centred Provision

- Decisions on planning, resources, curriculum and pastoral care reflect at all times the needs and opportunities of the pupils within the school.

- A clear commitment exists to promoting equality of opportunity, high quality learning and a concern for individual pupils and a respect for diversity.

- A school culture of achievement, improvement and ambition exists with clear expectations that all pupils can and will achieve to the very best of their ability.

- Effective interventions and support are in place to meet the additional education and other needs of pupils and to help them overcome barriers to learning.

High Quality Teaching and Learning

- An emphasis on Literacy and Numeracy exists across the curriculum.

- Teachers are committed and enthusiastic, enjoying a positive relationship with their pupils and with other school-based staff and dedicated to improving learning.

- Teachers use adaptable, flexible teaching strategies that respond to the diversity within the classroom.

- Assessment and other data is used to effectively inform teaching and learning across the school and in the classroom and to promote improvement.

- Rigorous self-evaluation is carried out by teachers and the whole school, using objective data and leading to sustained self-improvement.

- Teachers reflect on their own work and the outcomes of individual pupils.

- Education outcomes reflect positively on the school and compare well, when benchmarked measurement is undertaken, against the performance of similar schools.

Effective Leadership

- An effective School Development Plan is in place, providing clear and realistic targets for improvement based on a sound vision for the school.

- School leaders demonstrate a commitment to providing professional development opportunities for staff, particularly teachers, and promote a readiness to share and learn from best practice

- The resources at the disposal of the school are managed properly and effectively, with appropriate arrangements in place for financial management; attendance management; and working relationships.

- School leaders monitor and evaluate effectively school outcomes, policies, practices and procedures and the School Development Plan itself.

A School Connected to its Local Community

- Good relationships that facilitate engagement and communication between the school and its parents and the wider community that it serves.

- The school and its teachers are held in respect by parents and the local community who in turn actively support the work of the school.

- Good relationships and clear channels of communication are in place between the school and the education agencies that support it.

Better Numeracy in Primary Schools

This document provided examples of effective practice, in a specific Numeracy context, as observed by ETI Inspectors within primary schools across Northern Ireland over recent years. Our staff agreed that, when taken together, these provided a detailed description of high quality provision for Numeracy. As such they were used to guide staff discussion in the production of this Policy. Individual examples taken from Better

Numeracy, which the school uses to guide practice, are referred to in the individual sections of our Policy..

Aims:

Relevant "Better Numeracy characteristics:

Ethos:

- The children and staff have a positive attitude towards Mathematics and Numeracy.

- There is a numeracy-rich environment; mathematical thinking and problem-solving are promoted through the creative use of the wider environment; interactive displays capture the children's

interest and enhance their enjoyment and understanding of Mathematics and Numeracy.

- There are very good working relationships between the teachers and the children; the teachers nurture the children's confidence whilst encouraging them to respond positively to learning challenges.

- Risk-taking is promoted as an opportunity to learn.

These are the 'Aims' which the staff has agreed are realistic and appropriate for our pupils. They represent the benefits which our pupils can expect to gain as a result of learning mathematics in St. Mary's Primary School.

They form a set of basic principles upon which the teaching of mathematics in our school is based:

- To ensure that every pupil fulfils their full potential as a learner of mathematics

- To foster a positive attitude to mathematics as an interesting and attractive part of the curriculum

- To develop the ability to think clearly and logically, with confidence, flexibility and independence of thought

- To develop a deeper understanding of mathematics through a process of enquiry and investigation

- To develop an understanding of the connectivity of patterns and relationships within mathematics

- To develop the ability to apply knowledge, skills and ideas in real life contexts outside the-classroom, and become aware of the uses of mathematics in the wider world

- To develop the ability to use mathematics as a means of communicating ideas

- To develop an ability and inclination to work both alone and cooperatively to solve mathematical problems

- To develop personal qualities such as perseverance, independent thinking, cooperation and self-confidence through a sense of achievement and success

- To develop an appreciation of the creative aspects of mathematics and an awareness of its aesthetic appeal

These basic principles are designed to contribute towards the achievement of the overall aim of the Northern Ireland Curriculum:

"
To empower young people to develop their potential and to make informed and responsible decisions throughout their lives as individuals, as contributors to society and as contributors to the economy and the environment. "

Learning and Teaching

The content of the Mathematics curriculum taught at St. Mary's Primary School is guided by our statutory requirement to deliver the statutory curriculum for Mathematics as laid out in the Northern Ireland Curriculum (CCEA 2007).

It sets out the minimum requirements that must be taught at each Key Stage, grouped into 5 areas: Processes, Number, Measures, Shape & Space and Handling Data. The staff has used this to complete yearly and eight weekly planners. Although these are largely already specified by the Revise Lines of Development for Mathematics (CCEA), the staff of St. Mary's Primary School has agreed a set of principles which will inform and guide the nature of the learning experiences of our children,

designed to achieve the aims detailed above. These principles are listed below, grouped under each of the five areas of mathematics:

Processes

The NI Curriculum specifies a progression of Processes skills for children to acquire as they develop their mathematical ability. In order to facilitate this, the teaching staff in St. Mary's Primary School will ensure that:

- Activities which allow the children to develop and enhance processes skills will be a regular feature of classroom life

- Opportunities will be provided for pupils to work collaboratively so that through discussion they can develop their use of mathematical language and organise their thinking

- Children will be asked to show an increasing level of independence in their planning and recording of work as they progress through the school

- Children will be asked to show an increasing level of independence in their selection of mathematics and materials as they progress through the school

- Opportunities will be provided for children to become familiar with and apply a range of problem-solving strategies

- Opportunities will be provided for children to search for patterns and use relationships in investigative work, leading to an appreciation of generalisations

- Opportunities will be provided for children to use an increasing range of mathematical language to facilitate their ability to communicate their mathematical ideas

SEE APPENDIX 1

Number

The NI Curriculum specifies a progression of Number-based skills for children to acquire as they develop their mathematical ability. In order to facilitate this, the teaching staff in St. Mary's Primary School will ensure that:

- Children will be encouraged to use mental calculations where appropriate

- Children will have the opportunity to discuss and develop a range of calculation strategies. Teaching will encourage flexibility of thinking and utilisation of connections within mathematics

Children's computational skills will be developed and consolidated using a balance between practice, and application in meaningful contexts, including Financial Capability

- Opportunities will be provided for children to develop their estimation skills, and will be encouraged to estimate answers before completing calculations

- Teaching will place a strong emphasis on ensuring children gain a sound understanding of the Place Value basis of the number system

Measures

The NI Curriculum specifies a progression of skills in Measures for children to acquire as they develop their mathematical ability. In order to facilitate this, the teaching staff in St. Patrick's Primary School will ensure that:

- Children will use a range of measuring equipment in meaningful contexts, and be encouraged to make choices regarding the most suitable equipment

- Children will follow a progression beginning with direct comparison, through measuring with non-standard units, to measuring with standard units with increasing accuracy

- Children will be given opportunities to develop estimation skills in all measures

- Teaching will place strong emphasis on ensuring that children understand that all measurement is approximate, and that they can make sensible decisions on the accuracy necessary in different situations

Shape and Space

The NI Curriculum specifies a progression of skills in Shape and Space for children to acquire as they develop their mathematical ability. In order to facilitate this, the teaching staff in St. Mary's Primary School will ensure that:

- Teaching will place emphasis on observing and understanding the properties of 2-d and 3-d shapes

- Opportunities will be provided for the practical construction and investigation of shapes

- Children will be given opportunities to explore position and movement in real-life contexts, utilising ICT where possible

Handling Data

The NI Curriculum specifies a progression of skills in Handling Data for children to acquire as they develop their mathematical ability. In order to facilitate this, the teaching staff in St. Patrick's Primary School will ensure that:

- Teaching will be designed to ensure that children understand that the collection, representation and interpretation of data is a means through which real- life decisions can be made

- Handling data skills are used as a means of solving problems, through a four-point process : Pose a question; Collect data; Organise, display & interpret data; Answer original question

- Children will be given opportunities to make decisions regarding the what information is collected, how it is collected, how information is processed and how it is displayed

- Children will be given opportunities to apply data handling skills in a range of contexts, across subject areas

- Children will be given opportunities to develop an increasing range of ICT based handling data skills

A typical Lesson

Usually the class will be working on the same unit, allowing the teacher to work with the whole class, with groups of pupils and, at times, with individual pupils. Mostly pupils will work in differentiated groups, but at times teachers will have mixed=-ability groups in order to enable different pupils to work together.

Each week every pupil will receive some whole-class or group teaching. We lay great stress on pupils talking about their mathematics to learn by articulating their thoughts and listening to the views of others. They also learn from the teacher by discussing their thinking.

A typical lesson in Year 1-7 will be structured like this:
- **Oral Work and mental calculation** (about 5 – 10 mins)
  This will involve whole-class work to rehearse, sharpen and develop mental and oral skills
- **The main teaching activity** (about 30-45 minutes)
  This will include both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work
- **Plenary** (about 10-15 minutes)
  This will involve work with the whole class to sort out misconceptions, identify progress and to summarise key facts and ideas. This may also take place after a set of lessons not necessarily after every single lesson

Teaching Approaches

Although each teacher is an individual, with their own personal style of teaching, the staff have agreed that the following points will be a feature of all teaching in Mathematics in St. Mary's Primary School. These are designed to ensure that every pupil is given the opportunity to experience success and to achieve as high a standard as possible.

Teachers will always strive to
- build children's confidence and self-esteem
- develop children's independence
- allow all children to experience regular success
- make mathematics a relevant and satisfying part of their school experience

Teaching will ensure that children make appropriate progress in their acquisition of the Skills, Understanding, Concepts, Facts and Competences as laid out in the NI Curriculum for Mathematics and Numeracy, through providing suitably differentiated learning activities to ensure that individual needs are properly addressed

Teachers will use a range of teaching strategies:
- Exposition by the teacher
- Practice and consolidation
- Practical work
- Discussion
- Problem-solving
- Investigative work

The choice of strategy will vary according to the age, ability, maturity and interests of the children

- Teachers recognise the vital importance of discussion to gain understanding, and to this end a sensible level of work-focussed conversation will be a feature of most lessons

- Teachers will ensure that the activities which the pupils experience in mathematics will enable them to develop the statutory Thinking Skills and Personal Capabilities set out in the NI Curriculum: Thinking, Problem-Solving and Decision Making, Managing Information, Being Creative, Self-Management and Working with Others

- Teachers will ensure that the activities which the pupils experience in mathematics will also enable them to develop the statutory Cross Curricular Skills set out in the NI Curriculum: Communication, Using Mathematics and Using ICT

Continuity and Progression

Continuity and Progression refer to the intentions of the school that each child has the opportunity to develop mathematical skills and understanding over time in the most effective manner possible. We believe this is best achieved when:

- Children's learning experiences follow a well-planned progression, at a pace suitable for each child

- There is coherence and compatibility of approach used by all teachers the child encounters as they progress through the school

In order to achieve these conditions, staff has agreed that:

- The curriculum the children follow is defined by the School Scheme of Work, which is based upon the progression in each of the 5 areas of mathematics contained within the NI Curriculum
- The School Scheme of Work is planned collaboratively to ensure there are no gaps or unnecessary overlaps in that progression as the children move through the school

- The School planners details agreed teaching approaches and methodologies in all areas of maths

- Yearly overviews of the content to be taught in each class are produced, which allow content from each area of mathematics to be taught within each half term

- All new ideas and concepts which the children encounter will be introduced from a starting point within the child's knowledge and understanding
- Assessment is designed to allow the teacher to accurately gauge the child's present level of understanding so as to allow appropriate further work to be planned

- Activities in mathematics will be differentiated so that children are always working at a pace and level of challenge which matches their ability

- Planning will be regularly monitored by the Mathematics and Numeracy Coordinator to evaluate the levels of continuity and progression achieved

Monitoring and Evaluating Children's Work

This section details the various assessment methods and practices used in St Mary's Primary School through which we ensure that children are making appropriate progress and that the activities they take part in are suitably matched to their ability and level of development.

Assessment is an integral and continuous part of the teaching and learning process at St. Mary's Primary School and much of it is done informally as part of each teacher's day to day work. Teachers continually assess children's performance and progress, and the effectiveness of their teaching approaches and strategies. Teacher's planning is based upon the identification of Learning Intentions for the children; assessment is therefore based upon deciding the extent to which Learning Intentions have been achieved. Information is gathered in a variety of ways:

- Discussion between child and teacher

- Observation whilst children are participating in activities • Marking written work produced by the children as a result of a mathematical activity

- Self-evaluation by children themselves

- Feedback from planned sessions

Feedback is given to pupils, giving clear guidance as to how their learning can be improved. More formal methods are used to determine the levels of achievement of children at various times during the school year:

- Weekly/Monthly class tests.

- Mental Maths Core Competences. The staff have agreed a set of learning outcomes for mental calculations for each Primary which it is intended that as many children as possible should achieve. The achievement of these will be assessed on an on-going basis.

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This should help inform future planning for the child's new teacher for the incoming academic year.
(See Appendix 2)

- Assessment for Learning. Teachers ensure that all pupils are actively involved in their own learning through an Assessment for Learning approach:

- Learning Intentions are shared and discussed with pupils to ensure that they clearly understand the actual learning which should take place.

- Success Criteria are discussed and agreed, so that pupils are aware of the standards by which their work will be assessed, and will be able to evaluate the quality of their own work against the agreed Success Criteria o Feedback, both oral and written, is given to pupils which details how they can improve their learning by reference to the agreed Success Criteria

- Assessment outcomes are used by the teacher to inform future planning

- Pupils are given regular opportunities to assess their own and their peers work, evaluate the quality and extent of their own learning, set their own goals for improvement, and evaluate their achievement of these goals

- Use of Sumdog challenges (set in different curricular areas)

- Standardised Testing (Progress in Maths)
  Standardised tests are used once a year, towards the end of the year. They allow the school to measure each child's attainment in all areas of mathematics, and compare this with an "average" for children of that age. The results are used to monitor individual's progress year on year, to rank order a class and to identify those children who have Special Needs in Mathematics. Individual results are also aggregated, to allow the school to identify strengths ad areas for improvement in the provision for mathematics across the whole school, across individual Key Stages and within particular groups and classes .

- Statutory End of Key Stage Assessment. The NI Curriculum requires that each child is assessed, and assigned a Level of

Attainment for Mathematics. This is to be carried out at the end of Key Stage One (i.e. towards the end of the PA year) and at the end of Key Stage Two (i.e. towards the end of the P.7 year). The KS 1 Level for a child will normally be within the range of Level 1 to Level 3, with most children achieving Level 2. The KS 2 Level for a child will normally be within the range Level 1 to Level 5, with most children achieving Level 4. Although Levels are assessed for each area of mathematics, parents will normally be informed of one overall Level for mathematics, calculated by averaging the Levels achieved in each of the 5 areas.

Record Keeping

In St. Mary's Primary School, a record of achievement of Mental Maths Core Competences is also kept and passed on as the child moves to the next class. (see Appendix 2)

Target Setting

We use the results of Statutory Assessment as a vehicle for setting performance targets for Mathematics. Each September the relevant teachers undertake a process to set targets for:

KSI
    % of children achieving Level 2 and above
    % of children achieving Level 3

KS2
    % of children achieving Level 4 and above
    % of children achieving Level 5

These targets are arrived through consideration of each child's performance to date, their PIM standardised scores for Mathematics in previous years and their Level of Attainment at KS 1 (applicable for KS2 Assessment only)

Identifying and Addressing Underachievement

As stated above we consider it to be absolutely essential that each and every pupil fulfils their full potential as a learner of Mathematics. To this end we aim to identify any pupils who are under-achieving, and to ensure that an appropriate remediation process is set in place, based on specific identified areas for improvement. Every pupil's current PIM

(Progress in Maths) standardised score is compared with their most recent NRIT (Non-reading Intelligence Test) or CAT standardised score. If a pupil's PIM score is 10 or more points below their NRIT/CAT score, this is an indication that the pupil is under-achieving in mathematics.

When individual pupils are identified in this way, extra support is provided to ensure that the pupil achieves in line with their potential.

Calculators

In St. Mary's Primary School, we believe that the availability of calculators should never be a reason for children not learning basic number facts, nor being able to calculate mentally and using written methods.

Our Mental Maths progression sets great value and importance on children knowing appropriate number facts off by heart, and being able to use a variety of strategies to calculate in their heads.
We also believe that it is vital that children are able to perform pencil and paper calculations efficiently and effectively, which is reflected in our eight weekly planners

However, we also recognise that calculators are widely used in everyday life and will strive to ensure that the children are able to use a calculator efficiently and effectively. To this end, children in our school will, at a level matched to their mathematical progress:

- Explore the use of calculators through play and number games

- Check the calculator result, by estimating before calculating and or by performing an inverse operation

- Interpret a calculator display, e.g. in the context of money, or where decimal numbers are involved

- Use calculators in real-life problem solving activities, where the data used will not be so amenable to written or mental calculations. In these situations the emphasis is on selecting the appropriate calculation more than the actual working out of the calculation

- Use calculators in investigative work: eg trying lots of examples to find patterns, using trial and improvement methods to find an

answer. Here the calculator supports rather than replaces mathematical thinking.

Mental Maths

At St. Mary's Primary School, we recognise the vital importance of a child's ability to calculate mentally. We believe that an ability and inclination to calculate mentally leads to greater proficiency and understanding in all areas of Mathematics, and is a crucial skill in the application of mathematics in the world outside the classroom. We will strive to ensure that:

Children build up a bank of number facts which they know off by heart, to include addition, subtraction, multiplication and division facts

- Children are able to use these known facts to perform an increasing range of calculations in their heads, using a variety of methods

- Children build up a good understanding of the Number System, based on Place Value of Base 10

In order to facilitate this, teachers will:

- Ensure children are taught a minimum of 10 minutes mental maths per day

- Implement a structured progression of mental maths, based on specific intended learning outcomes

- Regularly assess children's achievement of these learning outcomes o Use a variety of teaching activities, including mathematical games and ICT, in whole class, group and individual work

- Ensure that a record of children's achievement in mental maths kept and passed on to the next teacher when children move classes (see Appendix 3 for mental maths and Activities)

ICT

(For more detail on the role of ICT in enhancing Teaching and Learning in general, please see St. Mary's ICT Policy)

In the NI Curriculum, ICT is not a separate learning area. Rather its role can be considered as a tool by which teaching and learning can be enhanced. This is very applicable in Mathematics, eg.

- Number Facts
- Graphical Representation
- Concept of angle
- Co-ordinates .
- Ordering measures
- Organising and interpreting data

In St. Mary's Primary School the staff will use a variety if ICT activities as part of the range of mathematical experiences which the children participate in. We believe that effective and appropriate use of ICT in mathematics can:

- facilitate a differentiated pace and level of learning that takes account of individual pupil abilities, including those who are more able

- help provide appropriate support and scope for greater independence for children at of all abilities

- facilitate access to sources of information from across the world

- foster the development of information skills that teach pupils to be discriminating in their use of information and to be able to shape and present it in ways appropriate to the context

- increase motivation to learn

- provide a stimulating and non-threatening learning environment

- engage children more deeply in their learning

In St Mary's ICT activities will include:

- Whole class or group activities, often led by the teacher. These may involve the use of an Interactive Whiteboard and will be a direct teaching aid, used to demonstrate ideas and promote discussion and clear mathematical thinking

- Individual or small group activities. These will usually involve the children working independently at a computer/I-pad or other devices, usually to complement current work on a particular topic

Resources will include software available through the C2K Managed Service and also via the Internet. (See Acceptable Use of Internet Policy) e.g Activ-Inspire and Sumdog

ICT activities form part of the range of activities detailed in our eight weekly planners

Special Needs

(See St. Mary's Special Needs Policy)

The SEN Policy applies to all areas of mathematics/numeracy and the individual needs of each child will be reflected within individual education plans. Differentiation and targeted teaching are directed towards all pupils to maximise their learning potential.

Leadership and Management of Mathematics and Numeracy:

In our school we have Miss Robinson who fulfils the role of Mathematics and Numeracy Co-ordinator, who has responsibility for the management of Mathematics and Numeracy development within the school. Specifically, these responsibilities include:

- In collaboration with the rest of the teaching staff, identifying priorities for development within numeracy

- Contributing to the production of the School Development Plan, if it is to include Numeracy Development

- Producing Action Plans to address these issues

- Monitoring and Evaluating the implementation of these Action Plans and the achievement of their Success Criteria

- In conjunction with relevant teachers producing annual targets for standards achieved in Statutory Assessment

- Monitoring and Evaluating pupil achievement, and producing whole school performance data from these results

- Updating the School Mathematics/Numeracy policy, to keep in line with curriculum changes

- In conjunction with the whole staff, participating in a programme of self-evaluation of the quality and effectiveness of mathematics/numeracy provision

- Organising and leading school based INSET and School Development Days

- Liaising with outside services to ensure staff receive suitable and sufficient support and training

- Maintaining a file of evidence indicating standards achieved within the school

- Providing support to all members of staff

Role of Parents

In St Mary's Primary School we believe that parents have a vital role to play in ensuring their children make appropriate progress and realise their potential in mathematics. We actively seek strong partnerships with parents and will work to ensure that parents feel involved in their child's education.

In St Mary's Primary School parents will:
- Be able to discuss their child's progress in mathematics, or any area of concern, at any times during the year by appointment with the class teacher
- Be invited to meet more formally with the class teacher once per year at Parent Teacher Interviews
- Receive one written report on their child's strengths, weaknesses and progress per year, usually in June
- Be encouraged to participate with their children in mathematical homework activities

Homework (See St Mary's Homework policy)

The nature of homework given will vary according to the age and level of progress of children but will always be designed to complement current class work to
- Inform parents of the type of work their child is currently involved with
- To allow the child to practise and improve skills introduced in class
- Give the child the opportunity to improve their ability to work independently and organise themselves

- To give teacher information on the extent to which children have achieved the skills/knowledge and understanding of what has been taught

In order to achieve these objectives we would request parents, as far as is possible to:

- Provide a suitable quite area for homework activities
- Discuss with their child what they are expected to do before they start
- Ensure their child starts homework early enough so they can complete it by a reasonable time
- Present children with practical activities e.g shopping and telling the time which will reinforce
- Identify mathematics/numeracy in the children's every day environment e.g road signs, counting steps etc

A Progression for Mathematical Processes Skills

This Progression was developed during a whole staff INSET session on 11th September 2020. The process involved reviewing the suggested progression for the Processes in Mathematics Attainment Target, as specified in the Revised Lines of Development for Mathematics/Numeracy (CCEA).

Teachers then discussed which skills were suitable for specifying as a target for most children to achieve by the end of each year during their time in St Mary's Primary School. It was felt that many of the skills would need to be consolidated over two or more years, so this is reflected in the Progression. The Progression will be implemented from _____, and each teacher will be responsible for designing suitable learning experiences for pupils to develop the appropriate skills as defined in the Progression.

The Progression, and the achievement of the skills by the pupils, will be monitored during _____, and any amendments will be made by _____.

Primary One:

MAKING AND MONITORING DECISIONS:

- **Select, with help from the teacher, materials and equipment for a task** *eg "What containers should we use to fill the bottle?"; "What can we use to find out which parcel is heavier?"; "What could we use to make 6 in different ways?"*

- **Use, with teacher support, mathematical materials** *eg to make own repeating patterns using sets of shapes or beads; to sort a collection of buttons in different ways.*

- **Solve everyday problems in the classroom or in role play** *eg "Are there enough knives, forks and plates for four?"; "Can you fit the blocks into the box?"*

- **Solve problems based on stories** *eg "Which bowl belongs to Mummy Bear?"; "Which bed is bigger than Baby Bear's but smaller than Daddy Bear's?"*

COMMUNICATING MATHEMATICALLY:

- **Use informal language to respond to questions and to talk about their work,** *eg "I put this shape there because it looks the same as the others but is bigger".*

- **Understand and use mathematical language,** *eg bigger; altogether; more; forwards,* when talking about their work.

- **Explore, through discussion, simple open-ended questions,** *eg: "How can we find out?"; "What should we do first?"; "What could we try next?"; "What materials could we use?"; "How could we sort these materials?"*

MATHEMATICAL REASONING:

- **Begin to talk about how a task might be approached,** *eg making scales balance; comparing 2 sets to find which is larger.*

- **Begin to recognise simple patterns and say what comes next.**

Primary Two:

MAKING AND MONITORING DECISIONS:

- Select, with help from the teacher, materials and equipment for a task
  eg "What containers should we use to fill the bottle?";"What can we use to find out which parcel is heavier?"; "What could we use to make 6 in different ways?"

- Use, with teacher support, mathematical materials *eg to make own repeating patterns using sets of shapes or beads; to sort a collection of buttons in different ways.*

- Solve everyday problems in the classroom or in role play *eg "Are there enough knives, forks and plates for four?"; "Can you fit the blocks into the box?"*

- Solve problems based on stories *eg "Which bowl belongs to Mummy Bear?"; "Which bed is bigger than Baby Bear's but smaller than Daddy Bear's?"*

- Begin to select with help from the teacher, materials and equipment to use in a task by understanding their special characteristics, *Eg materials with 2 or 3 properties; Cuisenaire Rods.*

COMMUNICATING MATHEMATICALLY:

- Use informal language to respond to questions and to talk about their work, *eg "I put this shape there because it looks the same as the others but is bigger".*

- Understand and use mathematical language, *eg bigger; altogether; more; forwards,* when talking about their work.

- Explore, through discussion, simple open-ended questions, *eg: "How can we find out?"; "What should we do first?"; "What could we try next?"; "What materials could we use?"; "How could we sort these materials?"*

- Talk about and/or record in own way, how a simple investigation was carried out, *eg finding different ways of making 6*

- Begin to understand and use an increasing range of mathematical language and symbols.

MATHEMATICAL REASONING:

- Talk about how a task might be approached, *eg making scales balance; comparing 2 sets to find which is larger.*

- Recognise simple patterns and say what comes next.

- Make simple predictions, giving reasons for them, *eg predict which shapes will roll and which will slide; predict what will happen when 2 objects are put on the balance scales.*

Primary Three:

MAKING AND MONITORING DECISIONS:

- Select with help from the teacher, materials and equipment to use in a task by understanding their special characteristics, *Eg materials with 2 or 3 properties; Cuisenaire Rods*

- Choose and use appropriate number operations and mental strategies to solve problems in a wide variety of contexts, *eg adding 7+8 by doubling and adjusting; subtracting 16 from 20 by counting on; adding 4+7 by putting the larger number first.*

- Talk about the information that needs to be gathered, *eg to plan food for a class party.*

- Select, with help, appropriate forms of mathematical representation, *eg block graph; Carroll diagram; Venn diagram; picture; model.*

COMMUNICATING MATHEMATICALLY:

- Understand and use an increasing range of mathematical language and symbols.

- Begin to respond to open-ended questions, *eg: "What information should we collect?"; "How should we organise it?"; "If the answer is 20, what might the question be?"; "How can we find out which jug holds most?"*

- Discuss possible approaches to solving a problem.

- Suggest ways of recording information.

- Use personal methods to record findings/present information.

- Use a variety of mathematical representations to present findings, *eg a given table; diagram; pictogram.*

MATHEMATICAL REASONING:

- Begin to explain their thinking, *eg:*
  how a task was approached/a problem was solved;
  simple patterns or relationships;
  the reason(s) for making a simple prediction;
  personal calculation strategies (eg, to add 5 and 6, you add 5 and 5 and 1 to make 11);
  how an estimate of a simple calculation or measurement was made;

Primary Four:

MAKING AND MONITORING DECISIONS:

- Select appropriate materials and equipment for a task through an understanding of their special characteristics, *eg choose a trundle wheel to measure the perimeter of the playground.*

- Choose and use appropriate number operations and ways of calculating in a wide range of contexts, *eg calculate the sum of two 2-digit numbers mentally by partitioning.*

- Suggest the information needed to carry out a task, how to obtain the information and ways to record it *eg, when carrying out a survey of vehicles passing the school.*

COMMUNICATING MATHEMATICALLY:

- Ask questions to clarify information.

- Discuss and respond to open-ended questions, *eg " What materials would help us?"; " What information should we collect, and how?"; "How are we going to report our findings?"; " What activity would take about 15 minutes to complete?"*

- Present findings in an appropriate way, *eg using a writing frame; making a list; drawing a table, diagram or sketch; completing a bar chart.*

- Begin to talk about how they carried out a task, *eg "We used a trundle wheel to measure each side of the playground, counting the clicks and writing down each length. We added the lengths together to find the distance round the outside."*

MATHEMATICAL REASONING:

- Review own way of working with (teacher/peers), *eg the steps taken; any patterns found or predictions made; that information and/or findings are presented in an organised way.*

- Consider alternative ways of working (with teacher/peers), *eg different ways to solve problems (eg adding 29 and 17 by rounding and adjusting; identifying a pattern); a more efficient way of working; ways to overcome difficulties.*

- Check accuracy of own work (with teacher/peers), *eg that entries have not been entered twice; that all information has been recorded; using addition and subtraction as inverse operations; the reasonableness of their outcomes.*

Primary Five:

MAKING AND MONITORING DECISIONS:

- Begin to organise own work and work systematically, *eg when finding out who can jump furthest.*

- Solve simple two-stage problems set in real life contexts,
  eg "How many packets of sweets costing 24p can we buy for £2 andhow much change would we have?"

- Begin to suggest how to present findings,
  eg using a list; table; drawing; diagram; bar chart; pictogram.

COMMUNICATING MATHEMATICALLY:

- Use a writing frame to plan what is needed to start solving the problem.

- Talk about how they carried out a task, *eg "We used a trundle wheel to measure each side of the playground, counting the clicks and writing down each length. We added the lengths together to find the distance round the outside."*

- Discuss and respond to open-ended questions, *eg: "What information do we need to carry out the task?"; "How can we obtain the information?"; "How can we record the information?"; "What shapes can you make using 2 identical triangles?"*

- Discuss and compare ideas and methods with others.

- Where appropriate, select or design a writing frame to plan work.

MATHEMATICAL REASONING:

- Explain their thinking, *eg the reasons for choices made in selecting materials and mathematics to use; how a task was approached/a problem was solved; the reason(s) for making a simple prediction; personal calculation strategies (eg, to find 15-8 you take away 5 to leave 10 and then take away 3); how an estimate of a simple calculation or measurement was made; simple patterns and relationships.*

- Compare own methods/findings/presentation with that of others.

- Begin to explore and use a range of problem solving strategies, persevering when difficulties are encountered, *eg making a list; drawing a picture/diagram; simplifying by using smaller numbers or working through identified steps;*

- Check accuracy of own results and findings, *eg check half of 32 =16 by doubling 16; the reasonableness of their outcomes.*

Primary Six:

MAKING AND MONITORING DECISIONS:

- Select and use materials and equipment required for their work, *eg computer database or graphical package; scales;stopwatch.*

- Identify and collect information required for a task, initially with teacher support.

- Suggest ways a task might be approached, *eg by simplifying the task; looking for a pattern; making a list.*

- Plan own work and work systematically.

- Suggest how to present findings, *eg using a data collection sheet; sketches/diagrams/charts; organised lists; tables (including frequency tables); prose.*

COMMUNICATING MATHEMATICALLY:

- Begin to choose a format to record work and give reasons for the choice.

- Begin to present findings using prose, numbers and symbols, to show how the problem was solved/investigation was carried out.

- Begin to use appropriate language to describe orally their work, *eg the mathematics used; the findings and how they are presented.*

MATHEMATICAL REASONING:

- Explore and use a range of problem solving strategies, persevering when difficulties are encountered, eg *making a list; drawing a picture/diagram; simplifying by using smaller numbers or working through identified steps;*

- Review and explain own way of working, *eg the steps taken; any patterns found or predictions made; that information and/or findings are presented in an organised way.*

- Check accuracy of own results and findings, *eg check half of 32 =16 by doubling 16; the reasonableness of their outcomes.*

- Explain their thinking, *eg the method/approach used and give reasons for the choice; personal calculation strategies (eg 337-180 is the same as 337-200+20); mathematical relationships, (eg, the perimeter of a regular shape).*

- Compare methods of presentation and discuss which shows the results most clearly.

- Discuss a general statement with teacher/peers and check whether particular cases match it, *eg any even number can be written as the sum of two odd numbers.*

- Discuss and share benchmarks for making estimates, *eg "My handspan is approximately 10 cm."*

Primary Seven:

MAKING AND MONITORING DECISIONS:

Continue to develop:
- Select and use materials and equipment required for their work, *eg computer database or graphical package; scales; stopwatch.*

- Identify and collect information required for a task, initially with teacher support.

- Suggest ways a task might be approached, *eg by simplifying the task; looking for a pattern; making a list.*

- Plan own work and work systematically.

- Suggest how to present findings, *eg using a data collection sheet; sketches/diagrams/charts; organised lists; tables (including frequency tables); prose.*

More able:
- Select and use effectively, materials and equipment required for their work, *eg squared paper; angle measurer; stopwatch.*

- Decide what information is required for a task and how to obtain it.

- Decide whether the information gathered is appropriate and sufficient for the task

- Select and use appropriate methods and strategies, *eg breaking the task into small steps; working backwards; using trial and improvement methods.*

- Plan and organise work in a systematic and efficient way.

- Decide how to present findings, *eg using symbols (%, <, >); line graphs; pie charts; frequency tables (grouped data).*

- Recognise and apply mathematics in contexts across the curriculum, *eg show science results using a line graph.*

COMMUNICATING MATHEMATICALLY:

- Choose a format to record work and give reasons for the choice.

- Present findings using prose, numbers and symbols, to show how the problem was solved/investigation was carried out.

- Use appropriate language to describe orally their work, *eg the mathematics used; the findings and how they are presented*

More able:
- Discuss and respond to open-ended questions, *eg: "What strategies could we use?"; "What is the most appropriate way of presenting our findings?"; "How could you make an estimate of this calculation?"; "How do you know if this shape tessellates?"*
- Discuss the mathematical thinking and strategies of others.

- Use mathematical language and symbols to record findings.

- Refine ways of recording, *eg using computer software.*

- Use the language of mathematics to express mathematical ideas precisely, *eg the approach to the task, the mathematics used, the findings and how they are presented.*

MATHEMATICAL REASONING:

- Use a range of problem solving strategies, trying different strategies when difficulties are encountered, *eg using smaller numbers; using trial and improvement; breaking the task into small steps; working backwards.* Give reasons for the choice of strategy used.

- Independently review own way of working, *eg the steps taken; that information/findings have been presented in an organised way; any patterns found or predictions made.*

- Independently use a variety of ways of checking results of calculations, *eg using multiplication and division as inverse operations; using the range in which the answer should lie.*

- Independently investigate a general statement, *eg, "All square numbers have an odd number of factors"; "Every even number from 6-100 can be made by adding together two prime numbers".*

More able:

- Make general statements based on findings and check using new examples.

- Recognise and use mathematical connections, *eg recognise that the external angle in a regular hexagon is 120° because it is one sixth of a whole turn (360 ° ÷ 6 = 60 °)*

- Make and justify estimations and approximations.

Appendix 2

Core

Competences

Primary 1 Core Competences

- Count orally in 1's forwards, backwards to/from 10

- Count in 1's forwards, backwards from a given number within 10

- Recognise, read, write numbers to 5, then 10

- Find numbers "before", "after", "between" within 10

- Order consecutive numbers increasing/decreasing

- Find missing numbers in consecutive sequence

- U/stand and use "first", "last"

- U/stand concept of zero as the empty set

- Conservation of number

Primary 2 Core Competences

- Count orally in 1's forwards/backwards from/to zero, within 20

- Count orally in 1's forwards, backwards from any number within 20

- Recognise, read, write numbers to 20

- Know number before, after, between within 20

- Order set of consecutive and random numbers within 20

- Identify missing numbers in a sequence within 20

- Add 1, 2, 0 to any number, answers within 10

- Know doubles to 5+5

- Know 3+2 and 2+3 to complete number stories to 5

- Subtract 1, 2, 0 from any number, answers within 10

Primary 3 Core Competences

- Identify missing numbers in a sequence within 50

- Count orally in 1's, 2's, 10's forwards, backwards to/from 0, then any given number, within 50

- Count orally in 5's forwards/backwards to/from 0, then any given multiple of 5, within 50

- Recognise, read, write and order numbers to 100

- Know number "before", "after", "between" within 100

- Demonstrate understanding of commutative nature of addition

- Add/subtract 1,2, 0 to/from any number, answers within 20, then 50

- Know doubles to 10+10 and know near doubles with answers within 10

- Know components of 10

- Know all remaining single digit addition facts within 10

- Find what must be added to a number to make 10

- Subtract a single digit from 10

- Add a single digit to 10 and vice versa

- Add/ subtract 10 or a multiple of 10 to/from any 2 digit number within 50
  (30+10, 32+10 , 44-10, 40-30 , 12+30 , 43-30)

Primary 4 Core Competences

- Identify missing numbers in a sequence within 100

- Count orally in 1's, 2's, 10's forwards/backwards to/from a given number within 100
- Count orally in 5's forwards/backwards to/from a multiple of 5 within 100
- Add/subtract 1,2, 0 to any number, answers within 100

- Subtract a single digit from 20

- Know position of tens digit indicates its value

- Add 2 single digit numbers, bridging 10   (6+8)

- Know any number subtracted from itself leaves 0 (24-24)

- Know that subtracting "adjacent" numbers leaves 1   (57-56)

- Know that subtracting "adjacent but 1" numbers leaves 2 (45-43)
- Know half of all even numbers to 20 and half of 50, 100

- Know all single digit subtraction facts within 10

- Find what must be added to a multiple of 10 to make 100 (60+ ?=100)
- Find what must be added to/subtracted from any 2 digit number to make the next highest/lowest multiple of 10   (33+ ? = 40) (47-?=40)

- Add/ subtract 10 or a multiple of 10 to/from any 2 digit number, answers within 100   (87+10 , 34 + 50, 67-10 , 89-40)

- Add/subtract 9,11 to/from any 2 digit number, answers within 100

- Add/subtract 21,31,19,29 etc to/from any 2 digit number, answers within 100   (47+29 ,   53-19)

- Know doubles of multiples of 10 to double 50   (double 30)

- Give approximate answers to written calculations within 100

- Know multiplication facts for 1X, 2X, 5X, 10X tables

Primary 5 Core Competences

- Count orally in 1's, 2's, 5's, 10's forwards and backwards from a given number within 1000

- Recognise, read, write numbers within 1000

- Order a set of consecutive/random numbers, increasing/decreasing within 1000
- Identify missing numbers in a sequence within 1000

- Know position of hundreds digit indicates its value

- Understand zero as a place holder

- Round numbers within 1000 to nearest hundred

- Read/write simple fraction notation

- Count forwards / backwards in halves, quarters

- Know all addition and subtraction facts within 20

- Add 3 single digit numbers

- Find doubles of multiples of 10, then of 5 up to 100 +100 and derive corresponding halves

- Find doubles of multiples of 100 up to 500+500

- Add/ subtract a single digit to/ from a 2 digit number, including bridging the 10 (o) (34+3 , 34+7 , 48-3, 43-8)

- Add/subtract two 2 digit numbers within 100, without bridging 10 (35+ 22 , 67-34)

- Find what must be added to any 2 digit number to make 100 (34+?=100)

- Find what must be added to multiples of 100 to make 1000 (400 +?=1000)

- Find what must be added to/subtracted from any 3 digit number to make the next higher/lower multiple of 10 (234 + ?=240 , 278- ?=200)

- Add/subtract 100 or a multiple of 100 to/from any 2 or 3 digit number within 1000
(34+400 , 327+ 100 , 400+ 300 , 564+ 300 , 742-500)

- Calculate doubles of multiples of 50, answers within 1000
and derive corresponding halves   (double 450 , half of 900)

- Calculate double of multiples of 10 up to 200 and derive corresponding halves   (double 130 , half of 260)

- Know multiplication facts for 3's, 4's xn. Tables

- Recognise multiplication and division are inverse operations

- Know division facts for 1's, 2's, 3's, 4's, 5's, 10's xn.Tables

- Recognise whole numbers which are exactly divisible by 2,5,10

Primary 6 Core Competences

- Recognise, read, write, order whole numbers within 10 000

- Recognise position of digit indicates value , inc numbers to 1 dp

- Recognise, read, write order decimal numbers to 1 dp

- Find doubles of any 2 digit numbers to 50 +50 (double 36) and derive corresponding halves (half of 72)

- Add/subtract two 2 digit numbers within 100, bridging the ten (34 + 28 , 53-36)

- Add a 2 digit multiple of 10 to a 2 digit number and vice versa, bridging through the hundred (78 + 60, 80+63)

- Add two 3 digit multiples of 10 without bridging 100 (340+ 420)

- Subtract a 2 or 3 digit multiple of 10 from a 3 digit multiple of 10, without bridging the hundred (670 – 40) (560 – 440)

- Find difference between two 3 digit numbers which are close (678-672)

- Know 6,7,8,9 Xn Table facts and derive corresponding division facts

- Multiply whole numbers by 10, by 100, answers within 10 000

- Divide whole numbers by 10, whole number answers

- Find equivalent fractions within simple fraction families

- Recognise, read, write, order fractions

- Find fractions of a quantity using unitary fractions where answer is a whole number within known table facts (One eighth of 48)

- Find 50%, 25%, 10% by finding half, quarter and tenth of a quantity

- Give approximate answers to written calculations within 10 000

- Add/ subtract a single digit to/from a 1 dp decimal number (2.3 + 4 , 5.6 – 3)

Primary 7 Core Competences

- Count, read, write, order numbers to 100,000

- Estimate the total of 2 or 3 items in a shopping list
  (£2.99 + £4.49 + £1.99)

- Give approximate answers to all written or calculator calculations

- Recognise position of digit indicates value, including decimal numbers
  to 2 dp

- Count read write order decimal numbers to 2 dp

- Find simple non-unitary fractions of quantities by dividing by
  denominator, multiplying by numerator; where answer is a whole
  number within known table facts (2/3 of 15)

- Find 20%. 30%, 40%.......... 90% of quantities by finding 10% and
  multiplying appropriately (40% of 80)

- Add 4 or more single digit numbers

- Add any number to a multiple of 1000   (4000 + 423)

- Subtract a multiple of 1000 from any 4 digit number (4567-3000)

- Add any two 2 digit numbers including bridging the 10 and 100
  (67 +77)

- Subtract a 2 digit multiple of 10 from any 3 digit number, without
  bridging the hundred (567- 40)

- Subtract a 3 digit multiple of 10 from a 3 digit multiple of 10 without
  bridging through the hundred (670 – 430)

- Add a 3 digit number to a 3 digit multiple of 10 without bridging through
  the hundred (620 + 337)

- Add/subtract decimals to 1 dp without bridging the unit
  (24.3 + 13.4 , 18.8 – 12.6)

- Find what must be added to a 1 dp decimal number to make the next
  whole number (23.2 + ? =24)

Primary 7 Core Competences Continued

- Multiply a 2 digit multiple of 10 by a single digit (40X7)

- Multiply a 3 digit multiple of 100 by a single digit (400X7)

- Multiply a 3 digit number by 100 (456 X 100)

- Multiply two 2 digit multiples of 10   (30 X 60)

- Divide whole numbers by 100, whole number answers (4600÷100)

Mental Mathematics Core Competences : Primary 1

Competences	Achieved	Children needing extra reinforcement								
Count orally in 1's forwards, backwards to/from 10										
Count in 1's frds,bkwrds from a given number within 10										
Recognise, read, write numbers to 5, then 10										
Find numbers "before" , "after",between" within 10										
Order consecutive numbers increasing/decreasing										
Find missing numbers in consecutive sequence										
U/stand and use "first", "last"										
U/stand concept of zero as the empty set										
Conservation of number										

Competences	Achieved	Children needing extra reinforcement						
Count orally in 1's frds, bkwrds to/from zero within 20								
Count orallyin 1's frds,bkwrds from a given number within 20								
Recognise, read, write numbers to 20								
Find numbers "before", "after", between" within 20								
Order consecutive and random numbers within 20								
Identify missing numbers in a sequence within 20								
Add 1, 2, 0 to any number, answers within 10								
Know doubles to 5+5								
Know 3+2 and 2+3 to complete number stories to 5								
Subtract 1, 2, 0 from any number, answers within 10								

Competences	Achieved	Children needing extra reinforcement									
Identify missing numbers in a sequence Within 50											
Count orally in 1's, 2's, 10's fwds, bkwds to/from 0, then any number within 50											
Count orally in 5's fwds/bkwds to/from 0, then any multiple of 5 within 50											
Recognise, read, write and order numbers to 100											
Know number "before", "after", "between" Within 100											
Demonstrate u/standing of commutative nature of addition											
Add/subtract 1, 2, 0 to/from any number within 20, then 50											
Know doubles to 10+10 , and know near doubles with answers within 10											
Know components of 10											
Know all remaining single digit addition facts within 10											
Find what must be added to a number to make 10											
Subtract a single digit from 10											
Add a single digit to 10 and vice versa											
Add/subtract 10 or a multiple of 10 to/from any 2 digit number within 50											

Mental Mathematics Core Competences : Primary 3

Competences	Achieved	Children needing extra reinforcement					
Identify missing numbers in a sequence within 100							
Count orally in 1's, 2's, 10's Fwds/bkwds to/from a given number within 100							
Count orally in 5's fwds/ bkwds to/from a multiple of 5 within 100							
Add/subtract 1, 2, 0 to/from any number, answers within 100							
Subtract a single digit from 20							
Know posn. Of tens digit indicates its value							
Add 2 single digit numbers, bridging the 10							
Know any number subtracted from itself leaves 0							
Know that subtracting "adjacent" numbers leaves 1							
Know that subtracting "adjacent" numbers leaves 1							
Know half of all even numbers to 20, and half of 50, 100							
Know all single digit subtraction facts within 10							
Find what must be added to a multiple of 10 to make 100							
Find what to add/subtract to/from any 2 digit number to make the next/previous multiple of 10							
Add/subtract 10 or a multiple of 10 to/from a 2 digit number, answers within 100							
Add/subtract 9/11 to from any 2 digit number, answers within 100							
Add/subtract 21, 31, 19, 29 etc to/from any 2 digit number, answers within 100							
Know doubles of multiples of 10 to double 50							
Give approximate answers to written calculations within 100							
Know multiplication facts for 1X, 2X, 5X, 10X tables							

Competences	Achieved	Children needing extra reinforcement					
Count orally in 1's,2's,5's, 10's fwds/bkwds from a given number within 1000							
Recognise, read, write numbers within 1000							
Order numbers increasing/ decreasing within 1000							
Know position of hundreds digit indicates value							
Understand zero as a place holder							
Round numbers within 1000 to nearest hundred							
Read/write simple fraction notation							
Count fwds/bkwds in halves, quarters							
Know all addition/subtraction facts within 20							
Add/subtract a single digit to/from a 2 digit number, including bridging the 10							
Add 3 single digit numbers							
Find doubles of multiples of 10, then of 5 up to 100+100, and derive corresponding halves							
Find doubles of multiples of 100 up to 500+500							
Add/subtract two 2-digit numbers, without bridging 10							
Find what must be added to any 2-digit number to make 100							
Find what must be added to multiples of 100 to make 1000							
Find what must be added to/subtracted from any 3-digit number to make the next higher/lower multiple of 10							
Add/subtract 100 or a multiple of 100 to/from any 2 or 3 digit number within 1000							
Calculate doubles of multiples of 50, answers within 1000, and derive corresponding halves							
Calculate doubles of multiples of 10 up to 200, and derive corresponding halves							
Know multiplication facts for 3's, 4's Xn. tables							
Recognise multiplication and division are inverse operations							
Know division facts from 1's,2's,3's,4's,5's,10's Xn. tables							
Recognise whole numbers which are exactly divisible by 2, 5, 10							

		Children needing extra reinforcement					
Competences	Achieved						
Recognise, read, write, order whole numbers within 10 000							
Recognise position of digit indicates value, including numbers to 1 dp							
Recognise, read, write, order numbers to 1 dp							
Find doubles of any 2-digit numbers to 50+50, and derive corresponding halves							
Add/subtract two 2-digit numbers, bridging the ten, answers within 100							
Add a 2 digit multiple of 10 to a 2-digit number and vice versa, inc bridging through the hundred							
Add two 3-digit multiples of 10, without bridging through the hundred							
Subtract a 2- or 3-digit multiple of 10 from a 3-digit multiple of 10, without bridging through the hundred							
Find the difference between two 3-digit numbers which are close							
Know 6, 7, 8, 9 Xn tables and derive corresponding division facts							
Multiply whole numbers by 10, 100, answers within 10 000							
Divide whole numbers by 10, whole number answers							
Find equivalent fractions within simple fraction families							
Recognise, read, write, order fractions							
Find fractions of quantities using unitary fractions where answer is within known tables facts							
Find 50%, 25%, 10% by finding half, quarter, tenth of a quantity							
Give approximate answers to written calculations within 10 000							
Add/subtract a single digit to/from a 1dp number							

Competences	Achieved	Children needing extra reinforcement					
Count, read, write, order numbers to 100 000							
Estimate the total of 2 or 3 items in a shopping list							
Give approximate answers to all written or calculator calculations							
Recognise position of digit indicates value, including numbers to 2 do							
Count, read, write, order decimal numbers to 2 dp							
Find simple non-unitary fractions of quantities by dividing by denominator, multiplying by numerator, where answer is within known Xn table facts							
Find 20%, 30%, 40%…90% of quantities by finding 10% and multiplying appropriately							
Add 4 or more single-digit numbers							
Add any number to a multiple of 1000							
Subtract a multiple of 1000 from any 4 digit number							
Add any two 2-digit numbers including bridging the ten and hundred							
Subtract a 2-digit multiple of 10 from any 3-digit number, without bridging the hundred							
Subtract a 3-digit multiple of 10 from a 3-digit multiple of 10, without bridging the hundred							
Add a 3-digit number to a 3-digit multiple of 10, without bridging the hundred							
Add/subtract decimal numbers to 1 dp, without bridging the unit							
Find what must be added to a 1 dp decimal number to make next whole number							
Multiply a 2-digit multiple of 10 by a single digit							
Multiply a 3-digit multiple of 100 by a single digit							
Multiply a 3 digit number by 100							
Multiply two 2-digit multiples of 10							
Divide whole numbers by 100,whole number answers							

MENTAL MATHS SCHEME

ST MARY'S PRIMARY SCHOOL

MAGHERY

Term 1 Primary 1 (Average)

(red)

- Count orally in 1's forwards 5
- Count in 1's forwards 10
- Recognise, read, write numbers to 5, then 10
- Find numbers "before", "after", within 10
- Order consecutive numbers increasing/decreasing
- Find missing numbers in consecutive sequence
- U/stand and use "first", "last"
- U/stand concept of zero as the empty set
- Conservation of number
- Add 1 to any number, answers within 10

Term2Primary 1 (Average)

(red)

- Count orally in 1's forwards, backwards to/from 10
- Count in 1's forwards, backwards from a given number within 10
- Recognise, read, write numbers to 5, then 10
- Find numbers "before", "after", "between" within 10
- Order consecutive numbers increasing/decreasing
- Find missing numbers in consecutive sequence
- U/stand and use "first", "last"
- U/stand concept of zero as the empty set
- Conservation of number
- Add 1 to any number, answers within 10

Term3

Primary 1 (Average)

(red)

- Count orally in 1's forwards, backwards to/from 10
- Count in 1's forwards, backwards from a given number within 10
- Recognise, read, write numbers to 5, then 10
- Find numbers "before", "after", "between" within 10
- Order consecutive numbers increasing/decreasing
- Find missing numbers in consecutive sequence
- U/stand and use "first", "last"
- U/stand concept of zero as the empty set
- Conservation of number
- Add 1 to any number, answers within 10

TERM 3

- Demonstrate u/standing that when adding, answer will be larger (r)
- Demonstrate u/standing that when subtracting, answer will be smaller (red)
- Count orally in 1's and 10's forwards/backwards from/to zero, within 50. (orange)
- Count orally in 1's, 2's forwards, backwards from a given number within 20. (o)
- Count orally in 10's forwards, backwards from a given number within 50 (o)
- Recognise, read, write numbers to 20, then 50 (o)
- Know number before, after, between within 20, then 50(o)
- Order set of consecutive and random numbers within 20, then 50(o)
- Identify missing numbers in a sequence within 20(o)
- Add 1, 2, 0 to any number, answers within 10, then 20
- Know doubles to 10 + 10 (r)
- Know 1 + 9 and 9+1 to complete number stories to 10 (r)
- Subtract 1 – 19 from any number, answers within 20 (r)

Term2 Primary 3

(orange)

Count orally in 1's, 2's,5's and 10's forwards/backwards from/to 0 within 50

- Count orally in 5's forwards/backwards from a given multiple of 5 within 50(o)
- Recognise, read, write numbers to 100(o)
- Know number "before", "after", "between" within 100(o)
- Order a set of consecutive/ random numbers increasing/decreasing within 100(o)
- Identify missing numbers in a sequence within 100(o)
- Use ordinal numbers to tenth place (6th,7th,8th)
- Demonstrate understanding of commutative nature of addition (r)
- Add/subtract 1,2, 0 to/from any number within 20, then 50 (o)
- Know doubles to 10+10 (o)
- Know near doubles within 10 (o)
- Know components of 10 (o) (e.g complementary addition, inverse addition and subtraction e.g 6+4=10 4+6=10
- Know all remaining single digit addition facts within 10 (o)
- Find what must be added to a number to make 10
- Subtract a single digit from 20
- Add a single digit to 10 and vice versa
- Subtract 10 from a 2 digit number within 20

Term 3 Primary 3

- Add/subtract 1,2 0 to any number within 100
- Add/Subtract 10 to/from a 2 digit number within 100 (74+10, 65-10)
- Count orally in 1's, 2's, 5's, 10's forwards/backwards from/to 0 within 100 (o)
- Count orally in 1's, 2's, 10's forwards, backwards from a given number's to 100(o)
- Count orally in 5's forwards/backwards from a given multiple within 100(o)
- Recognise, read, write numbers to 100(o)
- Know number "before", "after", "between" within 100(o)
- Order a set of consecutive/ random numbers increasing/decreasing within 100(o)
- Identify missing numbers in a sequence within 100(o)
- Find what must be added to a number to make 10 (complementary addition)
- Add/subtract 10 to/from a 2-digit number, answers within 50 (32+ 10 , 41-10)
- Add a single digit to a 2 digit number without bridging 10 (o) (34+3)
- Subtract a single digit from a number within 20, without bridging 10
- Subtract a single digit from a 2- digit number without bridging 20
- From 3 given numbers within 20, give 4 number facts
- Add/ subtract a multiple of 10 to/from a multiple of 10, answers within 50 (o) (20+ 20 , 50-40)
- Add/ subtract a multiple of 10 to/from any 2 digit number, answers within 50 (o) (12+ 30 , 43- 30)

Primary 4 Term 1

- Add/subtract 1,2, 0 to any number, answers within 100 (o)
- Add/subtract 10 to/from a 2-digit number, answers within 100 (o)
- Subtract a single digit from 20 (o)
- Add a single digit to a 2 digit number without bridging 10 (o) (54+3)
- Subtract a single digit from a number within 20, without bridging 10 (o) (17-4)
- Subtract a single digit from a 2-digit number without bridging 10 (o) (56-4)
- From 3 given numbers within 20, give 4 number facts
- Add 3 single digit numbers
- Use extended addition and subtraction patterns within 100(o)
- Know position of tens digit indicates its value
- Add 2 single digit numbers, bridging 10 (o) (6+8)
- Know any number subtracted from itself leaves 0 (o) (24-24)
- Know that subtracting "adjacent" numbers leaves 1 (o) (57-56)
- Know that subtracting "adjacent but 1" numbers leaves 2 (o) (45-43)
- Know all even numbers to 10 (o)
- Know half of 50, (o)
- Find half of even numbers to 20 (o)
- Know all single digit subtraction facts within 10 (o)
- Subtract a single digit from a number within 20, bridging 10 (o)
- Find what must be added to a number to make 20 (o)
- Add/ subtract a single digit to/ from a 2 digit number, bridging the 10 (o) (43-8)
- Know all remaining addition facts within 20
- Add 3 single digit numbers e.g 2 + 1 + 3=
- Subtract any number within 20
- Find halves of even numbers within 20.

Primary 4 Term 2

- Add/ subtract a multiple of 10 to/from a multiple of 10, answers within 100 (o) (30+40 , 60-20)
- Add/subtract 9,11 to/from any 2 digit number, answers within 100 (o)
- Add/ subtract a multiple of 10 to/from any 2 digit number, answers within 100 (o) (34 + 50, 89-40)
- Understand zero as a place holder(y)
  (400 +?=1000)
- Use to add/subtract 21,31,19,29 etc to/from any 2 digit number, answers within 100 (o) (47+29 ,   53-19)
- From 3 given numbers within 50 give 4 number facts (o)
- Demonstrate u/standing of multiplication as repeated addition(y)
- Demonstrate u/standing of commutative property of multiplication(y)
- Know multiplication facts for 1X, 2X, 3X, 4X 5X, 10X tables
- Read/write simple fraction notation
- Find doubles of multiples of 100 up to 500 + 500
- Add/Subtract two 2 digit numbers within 100, without, bridging 10 (35+22)
- Multiply any number by 1 and 0
- Find quarters of quantities which are multiples of 4 within 40 (quarter of 28)

Primary 4 Term 3

- Round numbers within 100 to nearest 10
- Count orally in 1's, 2's, 5's, 10's forwards and backwards from a given number within 1000 (y)
- Recognise, read, write numbers within 1000 (y)
- Order a set of consecutive/random numbers, increasing/decreasing within 1000 (y)
- Identify missing numbers in a sequence within 1000 (y)
- Know position of hundreds digit indicates its value. (y)
- Round numbers within 1000 to nearest hundred ✓
- Find doubles of multiples of 100 up to 500+500
- Add/subtract 100 to/from multiples of 100 within 1000 (300+100, 700- 100)
- Find what must be added to multiples of 100 to make 1000 (400 +?=1000)
- Add 100 to any 2 or 3 digit number within 1000 (345+100)
- Subtract 100 from any 3 digit number (478-100)
- Add a multiple of 100 to a 2 digit multiple of 10 (30+400)
- Add a multiple of 100 to any 2 or 3 digit number within 1000 (34+400 , 327+ 500)
- Add/Subtract multiples of 100 to/from multiples of 100 within 1000(300+400)
- Subtract a multiple of 100 from any 3 digit number (578-300)
- Calculate doubles of multiples of 50, answers within 1000 (double 450)
- Find what must be added to multiples of 100 to make 1000 e.g 400 + ? = 1000
- Add and subtract 100 to any 2/3 digit number within 1000 (345+100)
- Calculate doubles of multiples of 50 answers within 1000 (double 450)
- Derive resulting division facts
- Find quarters of quantities which are multiples of 4 within 40 (quarter of 28)

Primary 5 (average)

Term 1

- Know near doubles within 20 (8+7)
- Know multiplication facts for All Tables
- Know components of the number 20 (16+4)
- Know all remaining addition facts within 20
- Add 3 single digit numbers
- Subtract any number from 20
- Know all remaining subtraction facts within 20
- Find halves of even numbers within 20
- Add a multiple of 100 to a 2 digit multiple of 10 (30+400)
- Derive corresponding halves
- Count orally in multiples of 3,4,6,7,8,9 forwards and backwards
- Recognise, read, write, order whole numbers within 10 000

Term 2

- Know multiplication facts for All Tables
- Derive resulting division facts
- Read/write simple fraction notation
- Count forwards / backwards in halves, quarters
- Find doubles of multiples of 10, then of 5 up to 95+95
- Derive corresponding halves
- Find what must be added to any 2 digit number to make 100 (34+?=100)
- Add/subtract multiples of 100 to/from multiples of 100 within 1000 (300+400
  900-300)
- Find what must be added to multiples of 100 to make 1000
  (400 +?=1000)
- Add/subtract two 2 digit numbers within 100, without bridging 10
  (35+ 22 , 67-34)
- Find doubles of multiples of 100 up to 500+500
- Add/subtract 100 to/from multiples of 100 within 1000
  (300+100, 700- 100)
- Subtract 100 from any 3 digit number (478-100)
- Calculate double of multiples of 10 up to 200 (double 130)
- Give "multiples of.." , "factors of...
- Multiply a single digit by 6,7,8,9 and derive corresponding division facts
- Multiply whole numbers by 10, within 10 000
- Multiply whole numbers by 100, within 10 000
- Find fractions of a quantity using unitary fractions where answer is a whole
  number within known table facts (One eighth of 48)

Term 3

- Know multiplication facts for All Tables
- Derive resulting division facts
- Multiply any number by 1, by 0
- Find quarters of quantities which are multiples of 4 within 40 (quarter of 28)
- Find what must be added to/subtracted from any 3 digit number to make the next higher/lower multiple of 10, 10)
  (234 + ?=240 , 456-?=450 , 647 + ?=700 , 278- ?=200
- Add 100 to any 2 or 3 digit number within 1000 (345+100)
- Calculate doubles of multiples of 50, answers within 1000 (double 450)
- Derive corresponding halves
- Add a multiple of 100 to any 2 or 3 digit number within 1000 (34+400 , 327+ 500)
- Subtract a multiple of 100 from any 3 digit number (578-300)
- Find doubles of any 2 digit numbers to 50 +50 (double 36)
- Derive corresponding halves (half of 72)
- Find 50% by finding half of a quantity
- Find 25 % by finding quarter of a quantity
- Divide whole numbers by 10, whole number answers
- Find fractions of a quantity using unitary fractions where answer is a whole number within known table facts (One eighth of 48)

Primary 5 (more able)
(green)

- Recognise position of digit indicates value , inc numbers to 1 dp
- Recognise, read, write order decimal numbers to 1 dp
- Add/subtract two 2 digit numbers within 100, bridging the ten (34 + 28 , 53-36)
- Add two 2 digit multiples of 10, bridging the hundred (400+700)
- Add a 2 digit multiple of 10 to a 2 digit number and vice versa, bridging through the hundred (78 + 60, 80+63)
- Add two 3 digit multiples of 10 without bridging 100 (340+ 420)
- Subtract a 2 digit multiple of 10 from a 3 digit multiple of 10, without bridging the hundred (670 – 40)
- Subtract a 3 digit multiple of 10 from a 3 digit multiple of 10, without bridging the hundred (560 – 440)
- Find difference between two 3 digit numbers which are close (678-672)
- Find equivalent fractions within simple fraction families
- Recognise, read, write, order fractions
- Recognise, read, write, order decimals to 1 dp
- Find 10% by finding a tenth of a quantity
- Approximate numbers to nearest 10, 100 or 1000 as appropriate
- Approximate 1 dp decimal numbers to nearest whole number
- Add/ subtract a single digit to/from a 1 dp decimal number (2.3 + 4 , 5.6 – 3)

Primary 6 (average)

Term 1

- Count orally in multiples of 3,4,6,7,8,9 forwards and backwards
- Recognise, read, write, order whole numbers within 10 000
- Recognise position of digit indicates value , inc numbers to 1 dp
- Recognise, read, write order decimal numbers to 1 dp
- Find doubles of any 2 digit numbers to 50 +50 (double 36)
- Derive corresponding halves (half of 72)
- Add/subtract two 2 digit numbers within 100, bridging the ten (34 + 28 , 53-36)
- Add two 2 digit multiples of 10, bridging the hundred (400+700)
- Add a 2 digit multiple of 10 to a 2 digit number and vice versa, bridging through the hundred (78 + 60, 80+63)
- Estimate the total of 2 items in a shopping list (£2.99 + £1.99)
- Add 4 or more single digit numbers
- Add any 2 digit numbers including bridging the 10 and 100 (67 +77)
-

Term 2

- Add two 3 digit multiples of 10 without bridging 100 (340+ 420)
- Subtract a 2 digit multiple of 10 from a 3 digit multiple of 10, without bridging the hundred (670 – 40)
- Subtract a 3 digit multiple of 10 from a 3 digit multiple of 10, without bridging the hundred (560 – 440)
- Find difference between two 3 digit numbers which are close (678-672)
- Multiply a single digit by 6,7,8,9 and derive corresponding division facts
- Multiply whole numbers by 10, within 10 000
- Multiply whole numbers by 100, within 10 000
- Divide whole numbers by 10, whole number answers
- Recognise position of digit indicates value, including decimal numbers to 2 dp
- Find simple non-unitary fractions of quantities by dividing by denominator, multiplying by numerator
- (2/3 of 15)
- Add any number to a multiple of 1000 (4000 + 423)
- Subtract a multiple of 1000 from any 4 digit number (4567-3000)
- Subtract a 2 digit multiple of 10 from any 3 digit number, without bridging the hundred (567- 40)
- Subtract a 3 digit multiple of 10 from a 3 digit multiple of 10 without bridging through the hundred (670 – 430)
- Multiply a 2 digit multiple of 10 by a single digit (40X7)
- Multiply a 3 digit multiple of 100 by a single digit (400X7)

Term 3

- Give "multiples of..", "factors of...
- Find equivalent fractions **within** simple fraction families
- Recognise, read, write, order fractions
- Find fractions of a quantity using unitary fractions where answer is a whole number within known table facts (One eighth of 48)
- Recognise, read, write, order decimals to 1 dp
- Find 50% by finding half of a quantity
- Find 25 % by finding quarter of a quantity
- Find 10% by finding a tenth of a quantity
- Approximate numbers to nearest 10, 100 or 1000 as appropriate
- Approximate 1 dp decimal numbers to nearest whole number
- Add/ subtract a single digit to/from a 1 dp decimal number
  $(2.3 + 4 , 5.6 - 3)$
- Find what must be added to a fraction to make the next whole number ($3 \frac{2}{5}$ + ? makes 4
- Find what must be added to a 1 dp decimal number greater than 1 to make the next whole number $(23.2 + ? = 24)$
- Multiply a 3 digit number by 100 (456×100)
- Multiply two 2 digit multiples of 10 (30×60)
- Divide whole numbers by 100, whole number answers $(4600 \div 100)$
- Find 20%. 30%, 40%.......... 90% of quantities by finding 10% and multiplying appropriately (40% of 80)

Primary 6 (more able)
(green)

- Count, read, write, order numbers to 100,000
- Estimate the answers of written or calculator calculations
- Count read write order decimal numbers to 2 dp

Primary 6 (more able)

- Count, read, write, order numbers to 100,000
- Estimate the total of 2 or 3 items in a shopping list
  (£2.99 + £4.49 + £1.99)
- Estimate the answers of written or calculator calculations
- Recognise position of digit indicates value, including decimal
  numbers to 2 dp
- Count read write order decimal numbers to 2 dp
- Find simple non-unitary fractions of quantities by dividing by
  denominator, multiplying by numerator
  (2/3 of 15)
- Find 20%. 30%, 40%.......... 90% of quantities by finding 10% and
  multiplying appropriately (40% of 80)
- Find what must be added to a fraction to make the next whole
  number (3 $^2/_5$ + ? makes 4
- Add 4 or more single digit numbers
- Add any number to a multiple of 1000   (4000 + 423)
- Subtract a multiple of 1000 from any 4 digit number (4567-3000)
- Add any 2 digit numbers including bridging the 10 and 100
  (67 +77)
- Subtract a 2 digit multiple of 10 from any 3 digit number, without
  bridging the hundred (567- 40)
- Subtract a 3 digit multiple of 10 from a 3 digit multiple of 10
  without bridging through the hundred (670 – 430)
- Add two 3 digit numbers which are near doubles of multiples of 50
  (348 + 251)
- Add a 3 digit number to a 3 digit multiple of 10 without bridging
  through the hundred (620 + 337)
- Add/subtract decimals to 1 dp without bridging the unit
  (24.3 + 13.4 , 18.8 – 12.6)
- Find what must be added to a 1 dp decimal number greater than 1
  to make the next whole number (23.2 + ? =24)
- Multiply a 2 digit multiple of 10 by a single digit (40X7)
- Multiply a 3 digit multiple of 100 by a single digit (400X7)
- Multiply a 3 digit number by 100 (456 X 100)
- Multiply two 2 digit multiples of 10   (30 X 60)
- Divide whole numbers by 100, whole number answers (4600÷100)

Primary 7 (Average)

- Count, read, write, order numbers to 100,000
- Estimate the total of 2 or 3 items in a shopping list
  (£2.99 + £4.49 + £1.99)
- Estimate the answers of written or calculator calculations
- Recognise position of digit indicates value, including decimal numbers to 2 dp
- Count read write order decimal numbers to 2 dp
- Find simple non-unitary fractions of quantities by dividing by denominator, multiplying by numerator
  (2/3 of 15)
- Find 20%. 30%, 40%.......... 90% of quantities by finding 10% and multiplying appropriately (40% of 80)
- Find what must be added to a fraction to make the next whole number (3 $^2/_5$ + ? makes 4
- Add 4 or more single digit numbers
- Add any number to a multiple of 1000   (4000 + 423)
- Subtract a multiple of 1000 from any 4 digit number (4567-3000)
- Add any 2 digit numbers including bridging the 10 and 100
  (67 +77)
- Subtract a 2 digit multiple of 10 from any 3 digit number, without bridging the hundred (567- 40)
- Subtract a 3 digit multiple of 10 from a 3 digit multiple of 10 without bridging through the hundred (670 – 430)
- Add two 3 digit numbers which are near doubles of multiples of 50
  (248 + 251)
- Add a 3 digit number to a 3 digit multiple of 10 without bridging through the hundred (620 + 337)
- Add/subtract decimals to 1 dp without bridging the unit
  (24.3 + 13.4 , 18.8 – 12.6)
- Find what must be added to a 1 dp decimal number greater than 1 to make the next whole number (23.2 + ? =24)
- Multiply a 2 digit multiple of 10 by a single digit (40X7)
- Multiply a 3 digit multiple of 100 by a single digit (400X7)
- Multiply a 3 digit number by 100 (456 X 100)
- Multiply two 2 digit multiples of 10   (30 X 60)
- Divide whole numbers by 100, whole number answers (4600÷100)

Primary 7 (more able)

- Recognise, read, write and order whole numbers to any size
- U/stand and use negative numbers in context
- Use knowledge of inverse operations to aid and check calculations
- Identify prime, square and cube numbers
- Know squares of all numbers to 10
- Know cubes of all numbers to 5, and the cube of 10
- Read, write, order decimal numbers to 3 dp in context
- Convert between simple fractions, percentages and decimals
- Know when to round remainders up or down, depending on context
- Estimate before all written and calculator calculation
- Add two 3 digit multiples of 10, including bridging through 100 (360 + 470)
- Subtract two 3 digit multiples of 10, including bridging through 100 (420 – 240)
- Add a 3 digit number to a 3 digit multiple of 10, including bridging through 100 (470 + 343)
- Subtract a 3 digit multiple of 10 from a 3 digit number, without bridging through 100 (786 - 560)
- Add two 3 digit numbers without bridging through 10 or 100, answers within 1000 (364 + 522)
- Add two 3 digit numbers bridging through 10 but not 100, answers within 1000 (458 + 235)
- Add two 3 digit numbers bridging through 100 but not 10, answers within 1000 (181 + 433)
- Add two 3 digit numbers bridging through both 10 and 100, answers within 1000 (467 + 388)
- Add/subtract fractions including mixed numbers within fraction families (4 2/3 + 1 1/3)
- Find fractions of quantities (whole number answers) (3/4 of 60)
- Subtract a 1 dp number from a whole number (14 – 2.6)
- Multiply/divide any number by 10, 100, 1000 answers to include answers with up to 3 dp
- Multiply whole numbers by 50, 25
- Multiply any 2 digit number by a single digit (38X7)
- Multiply a 2 digit multiple of 10 by a 3 digit multiple of 100 (400X40)
- Multiply a 2 digit multiple of 10 by a 4 digit multiple of 1000 (6000X 30)

Primary 7 (more able) continued

- Divide a 2 digit number by a single digit within known table facts, remainder expressed as a fraction (77÷9)
- Divide any 2 digit number by 2 (halve), 4 (halve and halve again) or 5 (divide by 10 and double) expressing the answer as a fraction or decimal (39÷2 , 57÷4 , 66÷5
- Multiply any 3 digit multiple of 10 by 2, 4, or 5
  (340X2, 520X4 , 170 X 5)
- Multiply a 2 digit multiple of 10 by 15 (40X15)
- Multiply a 2 digit multiple of 10 by a near 2 digit multiple of 10 (40 X 39)
- Divide a multiple of 100 by a multiple of 10 where result is a whole number 600÷30
- Divide a multiple of 50 by 50 (450÷50)
- Divide a multiple of 25 by 25 (625÷25)
- Find %s of multiples of 100, factors of 100
  (24% of 400, 16% of 25)

This policy was compiled and agreed by the staff of St Mary's Maghery in January 2024.

Ratified at the BOG's meeting on

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Mr Jimmy McKee
(Chairperson)...

Miss Rita Robinson
(Principal)...