**Mathematics Plan Scoil Dhairbhre**

**Introductory Statement and Rationale**

**(a) Introductory Statement**

This Mathematics Whole School Plan was prepared by the staff of Scoil Dhairbhre during

the academic year 2016/17 and will be implemented in full from September 2017. It will be reviewed biannually.

**(b) Rationale**

This plan was designed in order to

* benefit teaching and learning in our school
* conform to principles of learning outlined in the Primary School Curriculum
* review the existing plan for mathematics
* review, consolidate, clarify and build upon aspects of our existing school plan for Mathematics
* improve the standard of Mathematics in our school
* organise and coordinate work being carried out already by staff in

Mathematics

* establish and provide a resource for staff members which is structured and researched
* provide a framework within which more specific planning can take place
* provide information for teachers, parents, Board of Management members and all other interested educational partners of the school community

**Vision and Aims**

**(a) Vision**

Our school cherishes all pupils equally and we aim to aid them in achieving their true potential. It is envisaged that after their primary schooling they will have acquired the necessary mathematical skills to participate fully in the mathematical curriculum in second level and to engage in problem solving of a practical nature in their everyday lives. We are hopeful that all pupils will be confident in using Mathematics and that they will have reached their Mathematical potential to the full in a meaningful and positive way.

**(b) Aims**

We endorse the following aims of the Primary School Curriculum for Mathematics.

* To develop a positive attitude towards mathematics and an appreciation of both its practical and its aesthetic aspects.
* To develop problem-solving abilities and a facility for the application of mathematics to everyday life.
* To enable the child to use mathematical language effectively and accurately.
* To enable the child to acquire an understanding of mathematical concepts and processes to his/her appropriate level of development and ability.
* To enable the child to acquire proficiency in fundamental mathematical skills and in recalling basic number facts.
* To provide many opportunities to revise Mathematics concepts before exploring new ones.
* To assess at regular intervals using a variety of methods.
* To share resources, ideas and practice.

**This Mathematics plan will be addressed under the following headings**

**Curriculum planning**

1. **Strands and strand units**
2. **Approaches and methodologies**
3. **Assessment and record keeping**
4. **Children with different needs**
5. **Equality of participation and access**

**Organisational planning**

1. **Timetable**
2. **Homework**
3. **Resources and ICT**
4. **Individual teachers’ planning and reporting**
5. **Staff development**
6. **Parental involvement - home school links**
7. **Community links**

**1. Strands and strand units**

*(For content overview see Curriculum: Infants p.17; First & Second classes p. 37; Third & Fourth classes p.61; Fifth & Sixth classes p. 85)*

**Planning**

|  |  |  |
| --- | --- | --- |
|  | **Infant Classes** | **First and Second****Classes** |
| **Strands** | **Strand Units** | **Strand Units** |
| **Early Mathematical****Activities** |  Classifying Matching Comparing Ordering |  |
| **Number** |  Counting Comparing andOrdering Analysis of Number Combining Partitioning Numeration |  Counting andNumeration Comparing and ordering Place value Operations Addition Subtraction Fractions |
| **Algebra** |  Extending Patterns |  Exploring and using patterns |
| **Shape and Space** |  Spatial awareness 3-D shapes 2-D shapes |  Spatial awareness 3-D shapes 2-D shapes Symmetry Angles |
| **Measures** |  Length Weight Capacity Time Money |  Length Area Weight Capacity Time Money |
| **Data** |  Recognising and interpreting data |  Recognising and interpreting data |

|  |  |  |
| --- | --- | --- |
|  | **Third and Fourth Class** | **Fifth and Sixth Class** |
| **Strand** | **Strand Units** | **Strand Units** |
| **Number** |  Place value Operations Addition and subtraction Multiplication anddivision Fractions Decimals |  Place value Operations Addition and subtraction Multiplication anddivision Fractions Decimals and percentages Number theory |
| **Algebra** |  Number pattern and sequences Number sentences |  Directed numbers Rules and properties Variables Equations |
| **Shape and Space** |  2-D shapes 3-D shapes Symmetry Lines and angles |  2-D shapes 3-D shapes Symmetry Lines and angles |
| **Measures** |  Length Weight Capacity Time Money |  Length Weight Capacity Time Money |
| **Data** |  Representing and interpreting data Chance |  Representing and interpreting data Chance |

In order to ensure that all teachers are familiar with the curriculum for their class level, we will review this plan biannually. We will complete a uniform Cúntas Míosúil in order to ensure that each

Strand and Strand Unit together with their content is being taught. In the multi-class setting it is advisable that the same strand/strand unit is taught to all groupings if possible at the same time. Text books are generally not shared in a multi class setting. Each class uses the textbook appropriate to their class level. Efforts will be made by all teachers to plan for integration across all curricular areas and linkage within mathematical area.

 Each teacher will allocate the correct amount of time to the teaching of Mathematics within their classroom. Infants will be three hours and thirty minutes, with Rang 1-Rang VI receiving four hours and thirty minutes per week. This will be clearly displayed on all class timetables.

**2. Approaches and methodologies**

*In the mathematics curriculum, the strands and strand units are viewed through the lens of the approaches and methodologies. (Refer to Teacher Guidelines: Mathematics pp. 30 - 67)*

**2.1 General**

All children will be provided with the opportunity to access the full range (all strands)

of the mathematics curriculum. In Scoil Dhairbhre we ensure that this

happens in the following ways:

* + Through adequate timetabling within each class
	+ Ensuring that pupils receiving supplementary teaching from the learning- support/resource teacher in the area of Maths do not, in so far as timetabling allows, have their additional teaching timetabled to clash with mainstream Maths lessons.
	+ Ensuring that there is less emphasis and reliance on textbooks and workbooks and more on active learning strategies
	+ Ensuring that the textbooks we do use are in line with content objectives for the class level.
	+ Encouraging the appropriate use of concrete materials in all classes throughout the school and not just in the junior room.
	+ Providing opportunities for all children from fourth to sixth class to use calculators, *e.g. to check answers, to explore the number system, to remove computational barriers for weaker children or to focus on problem solving.*
	+ Allowing pupils to collect real data in other areas of the curriculum and using it to represent their findings i.e. using data from other subjects such as geography, history or science to find the answer to a question. Gathering data to answer their own questions such as “Do more/less children walk to school this year than five years ago?” “What are the three favourite vegetables eaten by children in our class? ‟
	+ Engaging in estimation strategies through every appropriate strand within the maths curriculum e.g. Shape and Space.
	+ Using whole school strategies and initiatives to raise the profile of mathematics as a subject to be enjoyed by all children, *e.g. mathematics fun days, display of mathematics work in school, Maths Trails during Maths Week.*
	+ Teachers ensure that the relevant Maths language is implemented appropriately and in context formally through Maths instruction and informally across the Curriculum
	+ Exposing children to a Maths rich environment both within the classroom and in the wider school environment.

**2.2 Talk and discussion**

*Guided discussion and discussion skills*

 Talk and discussion in mathematics is taken seriously and seen as an integral part of the learning process, *e.g. teacher/pupil, pupil/pupil, pupil/teacher. This will provide the focus for the beginning of all Maths lessons particularly in the initial stages of a topic.*

We provide opportunities for pupils to explain how they got the answer to a problem, discuss alternative ways of approaching a problem or give oral descriptions of group solutions. This will be particularly important in Problem Solving lessons but will be relevant to all areas of the Maths Curriculum.

 Discussion skills are enhanced by turn taking, active listening, positive response to the opinion of others, confidence in putting forward an opinion, ability to explain clearly their point of view and re-voicing methods others have shared or used.

*Scaffolding*

 Teachers actively model the language to be used, particularly when talking through the problem-solving process.

*Integration*

 A thematic approach will be used for linkage within mathematics and integration across all areas of the curriculum e.g. measuring volumes of liquids in Science, collecting Data in S.E.S.E.

*Linkage*

 Teachers will provide opportunities where a thematic approach might be used for linkage, *e.g. when dealing with decimals we also aware of their use in data- pie charts; measures - all areas but particularly Money for introducing* *Decimals.*

*Mathematical language in context*

 There is an agreed emphasis on the language of mathematics i.e. for each class level we have a list of terminologies, language. This list of terms and language can be found at the back of this Whole School Plan for Mathematics. There is a conscious effort made to use the children’s own ideas and environment as a basis for reinforcing mathematical language, *e.g. you are* *taller than he is, teacher’s table is longer/wider than yours?*

 Teachers have identified common approaches to the language used in:

o Addition – total, sum of, add, and …

o Subtraction – minus, subtraction, take-away, difference, less than …

o Multiplication – times, product of, multiply, groups of …

o Division – divide, share, split, groups of …

o Equals – same as, is, will be, answer is, means …

This list accompanies this school plan.

*Note: Although the whole-school plan identifies particular terms to be used at different class levels, care must be taken that children, during their school career, are exposed to the different terms used in relation to the symbols e.g. +, add, plus*

*Number facts*

There is a common approach to the teaching of number facts (tables), *e.g. for* *3 X 4, we say three fours.*

 Children are aware of the commutative properties of multiplication tables and of their relationship with division. We teach subtraction and division tables separately from addition and multiplication. These are taught in the order of:

- addition and subtraction in First and Second

-revision of addition and subtraction in Third and Fourth

-introduction of multiplication and division in Third and Fourth

-revision of multiplication and division in Fifth and Sixth

**2.3 Active learning and guided discovery**

There are agreed strategies for teaching:

* Addition - bottom to top
* Subtraction –we use concrete materials in the initial stages along with the crossing out of pictorial representations. We also focus on subtraction in its vertical state. When we are subtracting using regrouping we will focus on the “crossing out” method once the initial work has been done and the concept is understood. As a staff, we have agreed that this will facilitate quicker work for those with a good understanding of Maths and will allow those who have difficulties in the area to follow a set number of steps to allow for accurate answering.
* Multiplication – we follow the steps of; groups of, skip counting initially, using mental strategies such as identifying doubles, near doubles, multiplying by 5 and 10, using games to reinforce facts, developing and honing estimation skills. We also focus on the vertical method of representation once simple multiplication has been mastered.
* Division –we begin with the concept of sharing, moving on to understanding division as repeated subtraction, developing and honing estimation skills. We use all of the methods of representing division in all classes in order to ensure pupils are familiar with all of the guises.
* We add and subtract fractions using pictorial representation initially and then moving on to the formula “find a common denominator and add the numerator”. We use these correct terms always.
* We add and subtract time by converting an hour to sixty minutes initially when needed.

Children encouraged to develop personal benchmarks, particularly in the measures

strand, *e.g. noting their height in relation to a metre, the width of their finger as close to a centimetre, the corridor is 105 tiles long.*

 Mathematical games are encouraged at each level e.g. dice, dominos, spinners etc. Websites are used to support the teaching of mathematical concepts. Many of the games on these sites are used in classes throughout the school.

**2.4 Collaborative and co-operative learning**

We ensure that children learn the skills needed to work *as* a group rather than just *in* a group, *e.g. listening to others, turn-taking, appreciating that others’* *opinions are important etc.* Opportunities are provided for children to learn from their peers, *e.g. buddy systems, think/pair/share, problem solving in groups*. Each class use a variety of organisational styles, *e.g. pair work, group work and whole class work.*

**2.5 Problem-solving**

The child’s attempts to solve a problem require him/her to call on many skills. Problems in mathematics have often been seen as textbook examples at the end of a section on a particular topic. Problems in life are rarely that simple and there is often more than one way of finding a solution.

Problem solving experiences should develop the ability to plan, take risks, learn from trial and error, check and evaluate solutions and think logically.

Discussion and acceptance of the points of view of others is central to the

development of problem-solving strategies.

Problems can be classified in many ways. They can be presented concretely, diagrammatically or in written form. They can be open or closed. They can relate to one particular content area or include elements from one or more strands.

A written problem can be difficult to solve because of the readability or because it has multiple steps to solution procedure. Large and awkward numbers often frighten children away from attempting a problem and if the information is not presented in the order in which it is to be used some children just give up without trying. If children are taught to analyse the problem carefully and extract the relevant information they can often find it easier to solve than it appeared at first.

Children need to develop problem solving skills in general and to be confident in their own ability to attempt a solution. Children will be taught a number of strategies for problem solving and to experiment with applying the same strategy to different problems and

different strategies to the same problems. These strategies will vary according to the child’s age. RUCSAC\* will be used to solve problems. RUCSAC stands for- Read, Underline keywords, choose an operation, Solve, Answer, Check

 The teacher will need to structure the problems given to the children so that they experience success. Rereading of the problem by the child will be encouraged. Cooperative group work and class discussion of the results of a problem solving exercise is encouraged. Children are asked to try different approaches themselves, to offer alternative solutions and to try them out on the board. We sometimes give children in senior classes problems with irrelevant information or with no solution possible because of missing information. This encourages them to analyse what it is that they are being asked for. Senior children are encouraged to invent problems for others to solve and discuss the results.

**Problem Solving Strategies**

Problem solving strategies must be varied and the children given ample opportunity to try them out concretely, orally or in a written task. Many children fail at mathematics because their mathematical vocabulary is insufficient to cope with the terminology of problems. Development of the necessary vocabulary in a consistent manner throughout the classes is stressed. Some strategies that we teach to children include:

* Constructing a model.
* Drawing a diagram to illustrate a problem
* Looking for patterns in a problem
* Making a guess and testing it out
* Breaking the problem down and solving each part
* Writing a number sequence for a problem
* Using appropriate equipment to solve a problem, for example balance, measuring instruments, calculator, blocks
* Solving a simpler version of the problem, for example using smaller numbers

**2.6 Using the environment**

 We use the school environment to provide opportunities for mathematical problem-solving *e.g. how high/wide is the door*. Mathematical trails developed by class teachers within or outside of the school building, which are in line with the school’s Health and Safety policy are used. Children are given the opportunities to present/display their mathematical work in the class and on noticeboards in the corridors.

**2.7 Skills through content**

 All teachers ensure that skills are being actively developed through the lesson content. *(See Teacher Guidelines: Mathematics pp 68-69)* There is evidence that the transfer of those skills is taking place in other areas:

* **Applying and problem solving***. e.g. selecting appropriate materials and processes in science*
* **Communicating and expressing,** *e.g. discussing and explaining the processes used to map an area in geography*
* **Integrating and connecting,** *e.g. recognising mathematics in the environment*
* **Reasoning,** *e.g. exploring and investigating patterns and relationships in music*
* **Implementing,** *e.g. using mathematics as an everyday life skill*
* **Understanding and recalling,** *e.g. understanding and recalling terminology, facts, definitions, and formulae.*

 All classes encourage the use of mental mathematics. This is done through the use of Mental Maths, Homework books and web/non-website based problems.

**3. Assessment and record keeping**

*(See Curriculum pp. 114-121, Teacher Guidelines pp. 64-65, the school’s* *Assessment Policy)*

 We know that assessment is being used to direct teaching and learning, as the staff look at results on both a class and school basis to see if there are areas of mathematics that can be improved. This is done following the SIGMA-Ts in the final term. We have an agreed whole-school approach to assessment in mathematics:

 SIGMAS are administered from First to Sixth each year in May/June.

1. Results are relayed in the form of STENs via reports cards in 2nd, 4th and 6th classes.
2. Teachers administer their own class based tests on a date agreed at the February / March staff meeting and results are collated and filed in the Standardised Test results folder for reporting to the DES.

We ensure that a broad range of assessment tools are used. These include

1. Teacher observation
2. Teacher-designed tests and tasks
3. Work samples
4. Text book term assessments.
5. Diagnostic tests (mainly resource/learning-support)

We ensure that standardised tests are being used in accordance with instructions given with the test by following the teacher guidelines given in each class booklet. We share information with other teachers in other schools and with other professionals upon written consent from parents. All records managed and stored in line with the school’s policy on record keeping.

**4. Children with different needs**

**4.1 Children with learning difficulties**

*(Refer to school’s Special Education Policy)*

* Our school policy allows for flexibility within the Maths programme to accommodate children with differing abilities.
* Children with special needs have access to all strands of the Primary School Curriculum.
* Teachers will tailor the Mathematics Curriculum to make it accessible to all pupils.
* Differentiation is used in each class level within the class. This may be within the areas of expected outcome, teaching style, resource used etc.
* The Special Education team provides supplementary teaching in Maths (in line with Guidelines for Primary Schools Supporting Pupils with Special Educational Needs in Mainstream Schools 2017)for children identified with learning difficulties. The availability of supplementary teaching for maths will be facilitated within the SEN allocation and as timetables allow.
* The SE team have access to and make use of many resources to assist children with special needs.

ICT is used regularly to support teaching and learning for children with special needs. LS/RT will liaise regularly with class teachers regarding I.E.P.s and I.P.L.P.s for pupils with special needs.

 Resources for Mathematics will be purchased following discussions at staff meetings.

**4.2 Children with exceptional ability**

 The school will endeavor to provide a range of strategies to provide challenges for children of exceptional ability.

* Teachers provide a challenging programme for these children.
* Children are facilitated to work on independent research projects.
* ICT is used to support their work.

**5. Equality of participation and access**

Mathematics can often wrongly be perceived as a subject that boys are better at than girls. In Scoil Dhairbhre, we endeavour to work to eradicate this myth. Equal opportunities are given to boys and girls to participate in discussions, use of manipulatives, presentations etc. All children have access to services, facilities, or amenities in the school environment. Provision is made, as and where necessary, for the following:

o Members of the Traveller community

o Children experiencing any form of disadvantage

o Children with disabilities

o Families with literacy problems

o Families for whom English is not their first language

**Organisation:**

1. ***Timetable***
* All teachers are aware of the time allocation at each level for mathematics and timetable it as such (i.e. 3 hours 25 minutes per week in the Infant classes and 4 hours 10 minutes from Rang I-Rang VI)
* When drafting timetables for withdrawal of pupils for supplementary numeracy teaching, Special Education teachers, in collaboration with the class teacher will mirror the mainstream mathematics programme as far as it is possible given the needs of the pupils.
* When timetabling maths in a multi-class situation teachers will try in as far as possible to timetable the same topic at the same time for all class.
* The Learning Support Teacher will take out and teach a class in the multi-class setting when possible.

**Time Allocation**

|  |  |  |
| --- | --- | --- |
| **Class** | **Daily time allocation** | **Weekly time allocation**  |
| Junior Infants | 30 minutes | 2 hours 30 minutes |
| Senior Infants | 30 minutes | 2 hours 30 minutes |
| First Class | 45 minutes  | 3 hours 45 minutes  |
| 2nd-6th  | 50 minutes  | 4 hours 10 minutes |

1. ***Homework***

*(Refer to school’s Homework Policy)*

* Mathematics homework reflects the active learning approach as described in the curriculum.
* As a staff, we believe that Mathematics homework is a vital component of Home/School relations. Homework in this area should inform parents of the work being done at school and allow for consolidation of same. Parents should supervise homework in line with the Homework Policy.
* Teachers differentiate homework taking into account the range of abilities within the class. This will be reflected in the cuntaisí míosúla.
* Children will receive homework Monday to Thursday with some exceptions at holiday time, special times of year.
* We ensure that children attending resources/learning-support are not going home with two sets of mathematics homework. This is done through constant communication between teachers and is taken on a case by case basis.
1. ***Resources***

**Equipment, textbooks, supplementary materials, calculators**

* Mathematics resources/materials
* Are stored distributed to classrooms where they are needed. It is envisaged that in the future they will be centrally located.
* Purchases of Mathematics equipment is discussed at staff meetings and approved by BOM.
* Individual teachers are responsible for managing resources in their rooms.
* Each class has supplementary resources such as posters that correspond to the Maths Curriculum.
* Instruction manuals and resources for Mata Sa Rang are stored in the main Special Education room off the hall.

**ICT**

* Each class has an interactive Whiteboard which teachers use daily to enhance the teaching of Mathematics.
* Software is stored in each classroom for the appropriate level. Individual teachers are responsible for the safe store and maintenance of this equipment.
* Staff share opportunities for enhancing pupil learning in mathematics through using the Internet. Useful websites are listed/displayed at the end of this plan.
* The school’s Acceptable Usage Policy ensures safe Internet usage.
1. ***Individual teachers’ planning and reporting***
* Teachers individual yearly and fortnightly plans are informed by the whole school plan and the curriculum documents for mathematics.
* New teachers/Substitutes are able to access the school plan from the folder in the office.
* Cuntais míosúil serve in reviewing and developing the whole school plan/individual teacher preparation for following years. Cuntais míosúil are stored in the filing cabinet in the office.
1. **Staff development**
* Teachers have access to current research, reference books, resource materials, websites, associations dealing with mathematics.
* Staff meetings, under Croke Park hours are used to facilitate the sharing of information.
* Teachers are encouraged to attend courses in the area of Numeracy, online, in the West Cork and Cork City Education Centres as part of C.P.D. and to relay information gathered to whole staff.
* Opportunities for team teaching can be facilitated in classes using Special Education teachers.
1. **Parental Involvement - home school links**
* We make parents aware of the content of the mathematics programme and the approaches/methodologies used in this school through homework, parent/teacher meetings and this plan.
* Parents are informed of standardised test results in the yearly report in 2nd 4th and 6th classes in line with best practice. Parents may request standardised test results on alternate years by notifying the class teacher. Class tests results are relayed through test sheets and signed by parents. Parent should monitor homework on a regular basis and contact the class teacher should they have any ongoing concerns.
1. **Community Links**
* Members of the community who could make a particular contribution to the mathematics programme are always welcomed and encouraged to share their knowledge base with pupils (Garda Vetting dependent).

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**Reference Section**

* Curriculum documents for Mathematics
* National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020.
* Our S.I.P also informed decisions in this plan.
* NCCA Assessment Guidelines
* Primary School Curriculum. Your child’s learning. Guidelines for Parents
* Learning-Support Guidelines, 2000, Government Publications
* NCCA Draft Guidelines for Teachers of Students with General Learning Disabilities 2002

**Websites**

|  |  |
| --- | --- |
| **PSCP** | [**www.pcsp.ie**](http://www.pcsp.ie) |
| **SDPS** | [**www.sdps.ie**](http://www.sdps.ie) |
| **NCTE** | [**www.ncte.ie/internetsafety**](http://www.ncte.ie/internetsafety) |
| **DES** | [**www.ncca.ie**](http://www.ncca.ie) |
| **PTMA Primary Teachers’ Mathematics Association** | [**www.primarymathematics.ie**](http://www.primarymathematics.ie) |
| **NPC Primary** | [**www.npc.ie**](http://www.npc.ie) |
| **DES** | [**www.education.ie**](http://www.education.ie) |

**Other websites that are used in this school include**

* [www.topmarks.com](http://www.topmarks.com)
* [www.kidsnumbers.com](http://www.kidsnumbers.com)
* [www.mathsplayground.com](http://www.mathsplayground.com)
* [www.coolmath4kids.com](http://www.coolmath4kids.com)
* [www.mathsisfun.com](http://www.mathsisfun.com)
* [www.xls.com](http://www.xls.com)
* [www.seomraranga.com](http://www.seomraranga.com)
* [www.primaryresources.co.uk](http://www.primaryresources.co.uk)
* [www.maths-drills.com](http://www.maths-drills.com)
* [www.primaryhomeworkhelp.co.uk/maths](http://www.primaryhomeworkhelp.co.uk/maths)
* [www.splat.com](http://www.splat.com)

This list is not exhaustive and will vary and adapt as new websites come online.

**Resources used in the delivery of the Maths Programme in Darrara N.S.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Early Mathematical Activities** | **Number** | **Algebra** | **Shape and Space** | **Measures** | **Data** |
| * A variety of counters
* Unifix cubes
* Links
* Sorting bowls
* Teddy bears
* Lollipop sticks
* Matching cards
* Pegs
 | * Counters
* Cubes
* Lollipop sticks
* Abacus
* BINGO-addition and subtraction
 | * Counters
* Beads
* Number lines
* Unifix cubes
* 100 squares
* Coins
* Dienes Blocks
* Calendar
* Dice
* Digit flips
* Fans
* Fraction charts and games
* Fraction walls
* Calculators
* Target Boards
* Playing cards
* Cuisenaire rods
 | * 2-D shapes
* 3-D shapes
* Tangrams
* Geo-strips
* Lollipops
* Protractors
* Set squares
* Compass
 | * Coins
* Clocks
* Trundle wheel
* Measuring jugs
* Metre Stick
* Balance
* Thermometer
* Kitchen scales
* Set of standard weights
* Samples of food in grams
* Measuring tape
* Cm rulers
* Measuring spoons
* Volume Set
* Egg timer
* Stop watch
* Timetables
* TV guides
* Atlas
* Catalogues
* Currencies
 | * Posters
* Dice
* Tables and charts from newspapers
* Playing cards

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**Success criteria**

This plan will make a difference to the teaching and learning of mathematics in our school.

**We will know that the plan has been implemented**

* Teachers’ preparation will be based on this plan
* Procedures outlined in this plan will be consistently followed
* Cúntaisí Míosúla

**Indicators that this plan has achieved its aims**

* Feedback from teachers/parents/pupils/community
* Inspectors’ suggestions/report
* Feedback from second level schools

**This plan will have achieved its aims when the pupils are**

* Enabled to access the mathematical curriculum at their level, while improving their mathematical skills

**Implementation**

1. **Roles and Responsibilities**

This plan will be co-ordinated by the class teachers with responsibility for Mathematics, along with the Principal of the school. Whole staff feedback on its implementation and development will be reported at staff meeting.

This plan will be monitored and evaluated bi-annually.

1. **Timeframe**

This plan will be implemented in September 2017

**Review**

It will be necessary to review this plan on a regular basis to ensure optimum implementation of the mathematics curriculum in this school

1. **Roles and Responsibilities**

All the following will be involved in the review

* Teachers
* Pupils
* Parents
* Post holders
* BoM

The Principal has responsibility for the review of this plan. This will be done in conjunction with the teachers with responsibility for Maths and the whole school staff.

1. **Timeframe**

This plan will be reviewed in June 2019

**Ratification and Communication**

This plan :

* Was uploaded to the school website on 4th May 2017 for the information of PA and Parents.
* PA and Parents were informed of the draft
* Was ratified by the Board of Management at its meeting on Tuesday May 30th 2017
* Will be reviewed in June 2019.

Signed :

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Ms. Bláthnaid Breslin Ms. Adrienne Downes

Principal / Sec. BOM Chairperson BOM (Acting)

**Reference Section**

* DES, 1999 Mathematics Primary Curriculum
* National Strategy to Improve Literacy and Numeracy among Children and young People 2011-2020
* NCCA Assessment Guidelines
* Primary School Curriculum. Your child’s learning. Guidelines for Parents
* Learning Support Guidelines, 2000, Government Publication
* NCCA Draft Guidelines for Teachers of Students with General Learning Disabilities, 2002