



# Roe Valley Integrated Primary School

## Mathematics and Numeracy Policy

Article 28 - Children have the right to a good quality education.



Signature of Chair of Board of Governors: \_\_\_\_\_ Ratified: \_\_\_\_\_

Signature of Principal: \_\_\_\_\_

Signature of Mathematics and Numeracy Coordinator \_\_\_\_\_

Reviewed and updated: December 2017

Review due: December 2019

## Mission Statement

### **Roe Valley IPS Mission**

**At Roe Valley we believe each child will reach their full potential through experiencing quality in the provision of:**

- A welcoming school where children are at the heart
- An ethos of respect, fairness and equality
- Valued children, staff and parents
- A broad, balanced and challenging curriculum
- Learning in a variety of ways, catering for all learning styles
- An environment where we learn from mistakes and everyone is encouraged to enjoy new experiences
- A strong partnership with parents, school and the community
- Up to date resources
- Energetic, enthusiastic and highly motivated staff

## Rationale

“Literacy and Numeracy are at the very heart of the NI curriculum” (para2.3) “Developing literacy and Numeracy therefore must be central elements of a school’s delivery of the NI curriculum, and of the support and professional development for teachers in implementing the curriculum” (para2.5) **Count, Read, Succeed**

The stated vision of the Department of Education for N Ireland (DENI) is *‘To ensure that every learner fulfils his or her potential at each stage of his or her development.’* (DENI 2010).

This has been enunciated in the overall aim of the N I Curriculum (DE 2008), which says, *‘The N Ireland Curriculum aims to empower young people to achieve their potential and to make informed and responsible decisions throughout their lives.’*

The School Improvement policy document, ‘Every School a Good School,’ (DENI 2009) has outlined indicators of what will be recognised as effective performance under four headings:

- **Child centred provision**
- **High quality teaching and learning**
- **Effective leadership**
- **A school connected to its local community.**

In essence Mathematics and Numeracy are one and the same as defined by the Northern Ireland Curriculum and DENI School Improvement Programme.

In Roe Valley IPS, we believe that Numeracy is a life skill, we endeavour to give our pupils the experience and confidence to cope with the practical demands of everyday life: in terms of computation,

measurement, data handling and problem solving. This is reflected in the commitment of the staff to promote and develop pupils mathematical and Numeracy skills **across** all curricular areas.

**Count, Read: Succeed** Para 1:10 defines Numeracy as:

*“The ability to apply appropriate mathematical skills and knowledge in familiar and unfamiliar contexts and in a range of settings throughout life, including the workplace. It involves the development of:*

- a. an understanding of key mathematical concepts and their inter- connectedness;*
- b. appropriate reasoning and problem solving;*
- c. the proficient and appropriate use of methods and procedures (formal and informal, mental and written); and*
- d. active participation in the exploration of mathematical ideas and models.”*

In Roe Valley Integrated Primary School, we intend that, by the end of Key Stage 2, a child will feel secure in their personal knowledge of mathematics. They should feel confident in being able to apply strategies to solve problems as well as being confident in what they have been taught and have formed connections between old information and new skills that have been taught.

#### Principles for Inclusion:

The following indicators from **Every School a Good School (ESaGS)** will be reflected in the school’s approaches:

- decisions on planning, resources, curriculum and pastoral care reflect at all times the needs and aspirations of the pupils within the school
- a clear commitment exists to promoting equality of opportunity, high quality learning, 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
- there is a commitment to involve young people in discussions and decisions on school life that directly affect them and to listen to their views

In our school we are aware that, ‘Pupils all have different experiences, interests and strengths which influence the way they learn.’ (NI Curriculum). Through the teaching of Mathematics and Numeracy we aim to provide learning opportunities for all pupils allowing children to progress and achieve, regardless of their special educational needs, any disabilities they may have, the social, cultural or religious background they come from or the ethnic group to which they belong. We also strive to meet the needs of pupils with special gifts and talents and those who are learning English as an additional language.

#### Aims

**In Roe Valley IPS we aim:**

- To foster a positive and exciting approach to all mathematical and numeracy activities across the school curriculum.
- To develop an awareness of the importance and relevance of all areas of mathematics in everyday life.
- To promote a differentiated learning environment, which takes account of:
  - *Gender*
  - *Cultural diversity*
  - *High and low achievers; including the Gifted and Talented*
  - *Children with Special Educational Needs.*

So that all pupils reach their full potential and experience success at every stage of their mathematical development.

- To provide a broad, balanced and relevant curriculum for “Using Mathematics” and planning a range of teaching strategies linked to NI Curriculum.
- To develop a secure understanding of the mathematical concepts, skills and knowledge through activity based learning.
- To foster an understanding of mathematics through a process of enquiry, experiment and application of thinking skills across the Attainment Targets.
- To encourage personal qualities of perseverance, confidence, independence and collaborative learning in an atmosphere of mutual respect and good humoured co-operation so all pupils are encouraged to participate actively.
- To promote mental mathematical strategies in number and in other aspects in mathematics.
- To encourage the use of digital technology to support and enhance the teaching of mathematics.
- To ensure a continuity of mathematical language and convention throughout each Key Stage.
- To assess and monitor progress to inform future planning.
- To support and encourage parents to become involved in their children’s learning.
- To encourage each teacher’s professional development within mathematics and the dissemination of good practice.

It is our intention that through the implementation of these aims we maintain and improve the standard of Numeracy throughout Roe Valley Integrated Primary School and have a culture of high expectations for all our pupils.

### **Child Centred Provision**

In Roe Valley Integrated Primary School decisions on planning, resources, curriculum and pastoral care reflect the needs and aspirations of the pupils within the school.

### **A Culture of Achievement through Differentiation**

In Roe Valley IPS we strive to have a school culture of achievement, improvement and ambition, with clear expectations that all pupils can and will achieve to the very best of their ability.

We include a variety of teaching approaches which meet the requirements of Para 5.3 ***Count, Read: Succeed*** ‘*Teachers, drawing on their professional expertise, will use a variety of teaching strategies including whole-class teaching, co-operative small group work and individual work, differentiated where appropriate*’.

Teachers will aim to include all pupils fully in their mathematical lessons by means of appropriate differentiation. Whole class teaching is acknowledged, as a very effective approach when introducing a new topic.

Each pupil's ability to move on confidently to written calculations relates to the quantity and variety of concrete experiences they have before they grasp a concept. Differentiation has also to take account of the degree of difficulty in mental calculations or the level of reading and interpretation needed in reading the text.

### **Early Intervention**

Teachers, with appropriate support, have the central role in raising standards in numeracy to ensure that every child fulfils her or his potential, including by identifying and addressing underachievement quickly and in a systematic way.

1. Provide high-quality teaching for all pupils;
2. Address underachievement as soon as it emerges;
3. Address continuing underachievement with support from other staff in the school;
4. Address continuing underachievement with support from outside the school; and
5. Meet the needs of pupils after a non-statutory assessment through the SEN framework.

#### **(Count Read Succeed Para 5.1)**

Through continual monitoring and assessment teachers will identify children who are underachieving. This may be identified through classroom observation, on-going formative assessment, PTM, NRIT, CAT and end of key stage assessments.

The first stage to remediate this will be to draw up a Record of Concern. The class teacher decides on the appropriate form of support such as, focussed guided work, additional resources, support from classroom assistant (where appropriate) and informs the SENCO.

Following this underachievement will be addressed with the support of the SENCO. IEP's will be drawn up to meet the pupil's needs and parents will be informed accordingly.

Other pupils who have a discrepancy between their NRIT/ CAT and their NFER PTM (mathematical score) may be identified as a "target" pupil for short-term remedial intervention.

Children who need intervention for Numeracy may receive additional support from teaching staff, classroom assistants.

Most of the support will be provided within the normal classroom environment and Wave 3 Programme. Further intervention will follow the Code of Practice as outlined in the Roe Valley IPS Special Educational Needs and Inclusion Policy.

When the special educational needs of individual children are identified in accordance with the school's special needs policy, the class teacher draws up clear and realistic Education Plans which are focussed on addressing the identified areas for improvement with SMARTER targets. These plans are monitored and reviewed regularly in consultation with SENCO, parents, other professionals and support agencies, where appropriate.

In Roe Valley IPS we recognise the vital role classroom assistants play in supporting our children's learning. All classroom assistants are given opportunities for continuing professional development and all have been trained in the principles of Wave 3 which they use in small groups or individual programmes.

### Gifted and Talented Learners

Gifted children will be identified and suitable learning challenges provided. Where possible more able pupils will be taught with their class and stretched through differentiated group work, extra challenges and published mathematical schemes developed for more able pupils. When working with the whole class, teachers will direct more challenging questions towards the more able to maintain their involvement.

### High Quality Teaching and Learning

The following indicators from Every School a Good School (ESaGS) will be reflected in the school's approaches:

- a broad and relevant curriculum is provided for the pupils
- 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

Teachers select learning intentions in order to meet the needs and developmental stages of their pupils and to enable them to acquire a comprehensive range of mathematical and numeracy knowledge, understanding and skills. The learning intentions provide a balance between number, measure, shape and space, handling data and encompass processes throughout.

The teaching strategies focus on the practical use of apparatus, use of different settings before moving onto written work. Children are encouraged to use a variety of mental strategies. These approaches form part of a balanced numeracy programme where opportunities across the curriculum allow for extension and further development of skills.

The NI Curriculum Council (CCEA) has reviewed the curriculum in order to place stronger emphasis on the **knowledge, understanding and skills** required in a modern, technological world. Knowing how to learn, rather than acquiring content knowledge, is now becoming the primary aim of schooling.

**Knowledge:** specific information about a subject

**Understanding:** having a realisation, comprehension or grasp of a subject, concept or issue.

**Skills:** having the ability to apply the knowledge and understanding.

Teachers inform children of the learning intentions and explain:

- What is to be learned – knowledge
- Why it is worth learning – purpose
- When it can be used – application
- How to learn and apply it – skills.

## Thinking Skills

Roe Valley IPS has focussed on the Thinking Skills Framework (CCEA 2006). The Framework incorporates three central skills for effective thinking.

### **Managing Information**

Asking, accessing selecting, recording, integrating

- ask focused questions
- use own and others' ideas to locate sources of information
- select, classify, compare and evaluate information
- select appropriate method for a task
- use a range of methods for collating, recording and representing information
- communicate with a sense of audience and purpose

### **Decision - Making**

Activating learning, deepening understanding, coping with challenges

- sequence, order, classify, make comparisons
- make predictions, examine evidence, distinguish between fact and opinion
- make links between cause and effect
- justify methods, opinions and conclusions
- generate possible solutions, try out alternative approaches, evaluate outcomes
- examine options, weigh up pros and cons
- use different types of questions
- make connections between learning in different contexts

### **Being Creative**

Imaging, generating, inventing, taking risks

- seek out questions to explore and problems to solve
- experiment with ideas and questions
- make new connections between ideas/ information
- learn and value other peoples' ideas
- make ideas real by experimenting with different designs, actions, outcomes
- challenge the routine method
- value the unexpected or surprising
- see opportunities in mistakes and failures
- take risks for learning

two areas as encompassing the essential dispositions for learning or habits of mind which make learning more powerful.

### **Working with Others**

Being Collaborative, being sensitive to others' feelings, being fair and responsible

- listen actively and share opinions

### **Self-management**

Knowing strengths and weaknesses, setting goals and targets, managing and regulating self

- be aware of personal

The learning and teaching of number and processes are on-going throughout the year. Other aspects e.g. graph work and measures are covered in a series of blocks as planned by each year group. The curriculum now has a stronger emphasis on the knowledge, understanding and skills required in a modern, technological world. Teachers try to incorporate valid links through cross-curricular planning so that pupils see connections throughout their learning.

Teachers are encouraged to share their learning intentions and success criteria with their pupils. Learners will be encouraged to reciprocate by engaging with the learning.

### **Classroom Organisation**

Classroom organisation will vary to suit the purpose, context and children involved. The following range of organisational strategies will be employed:

- Whole class teaching
- Small group teaching (size, flexibility and composition of the groups will be given consideration e.g.

- peer, ability, mixed ability, friendship groups, etc.)
- Paired work – similar ability or mixed ability
  - Individual tuition by teacher or classroom assistant
  - Independent work

### **Planning**

Effective planning for purposeful learning and teaching activities provides opportunities to develop children's thinking and communication skills.

In our **long term planning** we ensure that the programme of learning for each child is broad and balanced, and promotes continuity and progression in children's learning. Progression is ensured by working through CCEA Lines of Progression in Using Mathematics across the curriculum and the Northern Ireland Curriculum document.

Roe Valley IPS has developed lines of progression in all areas. There is a rolling cycle of review and development within each Mathematics area, which allows for the implementation and embedding of new approaches in the primary school curriculum.

**Medium term planners** are completed every month. These identify learning intentions, assessment opportunities, differentiation, resources and integration of ICT. They may also identify appropriate links to other areas of the curriculum so that pupils can develop and apply the skills they have learned in Using Mathematics. Teachers reflect on classroom practice. They evaluate plans and children's learning to inform future planning. Children have opportunities to peer and self-assess.

**Weekly mathematics planners** P1-3 follow a similar framework in each year group. These allow for clear differentiation between ability groups and specific pupils. Evaluations reflect the daily monitoring of pupils' achievements and movement within groups. Activities are adapted accordingly. Teachers plan for mental mathematics session at the beginning of the main teaching lesson. Lessons may vary in length but will usually last between 30 to 45 minutes in Foundation Stage/ Key Stage 1 and 50 to 60 minutes in Key Stage 2. Teaching has to be flexible and when there are appropriate links with other subjects and in particular ICT, it may result in certain days having more than one Numeracy session.

### **A Typical Lesson**

**Starter:** Oral work and mental maths, prior learning.

This will involve whole class work to introduce, revise, sharpen and develop mental and oral skills.

**The main teaching activity**

This will include both teaching input and pupil activities and a balance between whole class, grouped, paired and individual work. Learning intentions will be made explicit to the pupils at the start of each lesson.

Teachers try to ensure that when possible they include:

- Use of practical materials
- Mathematical language development
- Use of appropriate symbols
- Application of developing mathematical concepts

**A plenary**

This will normally involve summarising the learning, which has taken place, identify progress, and make links to other work and to discuss the next steps.

### **Assessment for Learning**

Monitoring and evaluating are integral parts of the learning and teaching at the overall class level, ability groups within the class and individual achievement.

We encourage a pupil's own self-assessment with the use of, thumbs up/ down, smiley or sad faces, traffic lights etc. as a means of children conveying how they feel they are coping with an aspect of the curriculum. Teachers then can plan and adapt their teaching accordingly.

It is part of our normal classroom practice for teachers to discuss the learning intentions and success criteria with children. This ensures that pupils understand the connections within their learning.

(Reference: Marking and Assessment policies)

### **Mathematical Environment**

In Roe Valley IPS we seek to provide a positive classroom environment which promotes pupils' self-confidence and self-assurance. It is the responsibility of the class teacher to facilitate an open and creative approach to mathematics. Investigations and mathematical puzzles are encouraged and discussions play a central role in developing appropriate mathematical language and providing an opportunity to apply mathematical concepts. Practical activities are fundamental to the introduction and consolidation of any new concept. Each classroom has a mathematics board for the display of interesting mathematical activities undertaken by pupils. This involves a variety of media and methods of recording as well as providing an opportunity to reinforce symbolic representation.

### **Resources**

Roe Valley IPS has invested in ranges of resources and materials to help the pupil learn with an emphasis on practical and visual learning. These resources are readily available in each classroom for pupils to access. Further mathematical equipment is shared or available from a central equipment store in P7 classroom. Pupils have access to the mathematical software available in the school classrooms. Teachers have access to ICT resources for their specific class on the school system.

A series of commercial maths schemes are used throughout the school including New Heinemann/Collins (core), Spotlight (an extension scheme), Number Connections and Rapid Maths (both support schemes).

### **Outdoor learning**

Experiences in mathematics are not solely classroom based and teachers are encouraged to involve the children in activities throughout the school and in our RVIPS grounds and local environment. Foundation Stage are developing their outdoor play curriculum.

### **Homework**

Mathematical homework will cover aspects of mathematics that have been previously learned and consolidated in school. Home activities whether online, written, practical or in the form of games give pupils an opportunity to extend their learning and allow parents/ carers to become more involved. Homework may include ICT links; teachers may recommend certain apps to parents e.g. times tables or websites for homework support. (Reference: Homework Policy)

### **Mathematics across the Curriculum**

**Should culminate in:**

**Using mathematics (processes)**

Opportunities will be provided for pupils to:

- choose the appropriate materials, equipment and mathematics to use in a particular situation.
- use mathematical knowledge and concepts.
- work systematically and check their work.
- use mathematics to solve problems and make decisions.
- develop methods and strategies, including mental mathematics.
- explore ideas, make and test predictions and think creatively.
- identify and collect information.
- read, interpret, organise and present information in mathematical formats.
- use mathematical language to ask and answer questions, talk about and discuss ideas and explain ways of working.

### **Knowledge and Understanding of Number**

Opportunities will be provided for pupils to:

- consider and discuss appropriate strategies for mental calculations.
- acquire a sound understanding of place value
- develop their estimation skills and use these skills to estimate answers before completing calculations
- develop and consolidate written computational skills using a balance between practice and application in meaningful contexts.
- use calculators appropriately
- explore and identify patterns and explain their reasoning when making generalisations
- search for patterns and use relationships in investigative work.

### **Knowledge and Understanding of Measures**

Opportunities will be provided for pupils to:

- use a range of appropriate measuring equipment.
- estimate and make appropriate comparisons.
- discuss the units of measurement, equipment and accuracy required when undertaking tasks.
- use decimal notation when recording metric measurement.

### **Knowledge and Understanding of Shape and Space**

Opportunities will be provided for pupils to:

- handle shapes and discuss their properties.
- construct and investigate shapes, including the use of ICT.
- appreciate the importance of size and scale.
- visualise and represent shapes.
- appreciate the relationship between shape and size.
- explore position, movement and direction in meaningful contexts.

### **Knowledge and Understanding of Handling Data**

Opportunities will be provided for pupils to:

- select, collect, organise, display and interpret data.
- apply handling data skills across the curriculum using ICT when appropriate
- discuss, make decisions and give reasons in relation to data handling activities.

### **Cross-Curricular Issues**

Using Mathematics is the skill of applying mathematical concepts, processes and understanding appropriately in a variety of contexts. Ideally these should be in relevant real life situations that require a mathematical dimension.

Across the curriculum, at a level appropriate to their ability, pupils should be enabled to:

- choose the appropriate materials, equipment and mathematics to use in a particular situation;
- use mathematical knowledge and concepts accurately;
- work systematically and check their work;
- use mathematics to solve problems and make decisions;
- develop methods and strategies, including mental mathematics;
- explore ideas, make and test predictions and think creatively;
- identify and collect information;
- read, interpret, organise and present information in mathematical formats;
- use mathematical understanding and language to ask and answer questions, talk about and discuss ideas and explain ways of working;
- develop financial capability;
- use ICT to solve problems and/or present their work.

### **The Role of I.C.T. in Supporting and Developing Numeracy**

In Roe Valley Integrated Primary School we aim to make effective use of I.C.T. across the Curriculum to promote the pupils' mathematical skills, as well as developing progressive competence in I.C.T. skills, assessed through ICT tasks and the Levels of Progression in Using ICT across the curriculum. This involves the use of class computers, the school ipads, the class Interactive White Board and also the possibilities offered by a range of audio-visual materials, radio and television broadcasts available as well as Beebot and Probot programmable devices.

Pupils will have ample opportunities to gain confidence in the use of I.C.T., e.g. using spread sheets, databases, graphical and programming software. The children's work will be used to enhance the school's website.

### **Effective Performance Data Management**

Data generated from standardised tests, and statutory assessments is analysed for a range of purposes:

- To track pupil progress
- To track complete classes
- To identify individual children's cognitive strengths and areas for improvement
- To inform learning and teaching
- To identify underachieving pupils for further support
- To set targets for individual pupils, groups or entire class
- To compare progress between groups / schools
- To make meaningful comparisons between scores from more than one test.

### **Effective Leadership:**

The following indicators from ESaGS will be reflected in the school's approaches:

- An effective school development plan is in place, providing clear and realistic targets for improvement based on a sound vision for the school.
- Governors understand their responsibilities and provide clear strategic direction as well as support and challenge to the Principal in carrying forward the process of improvement.

- 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.
- Teachers are given the opportunity to share in the leadership of the school.
- 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.

### **The Role of the Board of Governors**

The BOG has an important strategic role to play in the management of the school to provide the best possible education for all of the pupils. This involves

- Setting the school's vision and aims
- Establishing and maintaining the school's ethos;
- Setting the school's plans and policies for Mathematics and Numeracy
- Monitoring and evaluating school performance
- Promoting self-evaluation to sustain school improvement

### **The Role of the Principal**

- To monitor and evaluate the school's progress against identified success criteria
- Make informed decisions in matters such as expenditure, deployment of resources and use of time
- Harness the collective skills and talents of all the staff into a high- performing team
- To identify priorities for the professional development of staff
- To put procedures in place this will facilitate tracking of individual, group and class progress.
- To approve the Mathematics and Numeracy action plan annually.
- To report to BOG

### **The Role of the SLT**

Roe Valley IPS implements a rigorous process of regular self- evaluation to improve the mathematical education we give to our pupils. The SLT has an important role to play in the development of the three-year cycle of the school development plan.

- Provide a mechanism for the prioritisation and allocation of resources;
- Improve the quality of learning and teaching
- Improve the quality of experiences of the pupils
- Serve to raise the standards which the pupils attain.

### **The Role of the Co-ordinator**

All teachers in our school accept shared responsibility for promoting Numeracy throughout the school. However, the Numeracy Co-ordinator has responsibility for overseeing this work. In liaison with all staff, the primary duties include:

- Ensuring that Roe Valley IPS has a Numeracy Policy which is linked to our School Development Plan and annual targets.
- The development and maintenance of a school Mathematics and Numeracy Policy in consultation with

all staff.

- Establishing priorities for development in Numeracy across the school, in liaison with staff and following monitoring of assessments such as PTM.
- Devise an Action Plan each year to focus on one or more aspects of Numeracy, as part of Roe Valley's rigorous self-evaluation approach. This will depend on the main drive in the SDP for that academic year, as determined by the School Leadership Team (Principal, Vice- Principal, SENCO, Subject Co-ordinator).
- To encourage high quality learning and teaching and to lead by example by their own classroom practice.
- Providing support and motivation for colleagues in ensuring that the needs and aspirations of pupils are met and that standards of achievement in Using Mathematics are raised.
- Ensure teachers are familiar with the Lines of progression planned internally and the range of mathematical schemes currently available in the school.
- Regularly review and provide feedback to staff on planning, mathematical progression and content in mid-term planners and in book trawls
- To organise the moderation of mathematical tasks against the current criteria stipulated by CCEA.
- Observe mathematical lessons linked to PRSD and provide appropriate feedback to staff.
- To inform the principal and SLT of any issues which pertain to standards in Using Mathematics in the school
- Liaise with the SENCO when children are under – performing in Numeracy
- To work with the ICT co-ordinator when appropriate in order to monitor cohesive development of Mathematical skills with ICT Accreditation tasks.
- Attend INSET provided by agencies.
- Prepare, organise and lead INSET.
- Work co-operatively with the SENCO.
- To monitor NFER PTM (Primary 3 - 7) and other data in order to raise standards throughout the school along with the Principal and Assessment Co-ordinator.
- Lead Internal Standardisation in the Cross-Curricular Skill of Numeracy.
- Monitor Key Stage results in Cross-Curricular skills.
- Prioritise areas of concern, curriculum audits and development of Action Plans to address these areas.
- To compile and present to staff written documentation that has evolved due to internal reviews of practices and requirements in the Northern Ireland Curriculum.
- Show commitment and dedication to their own on-going professional development, and subsequent informing of the rest of the staff of recent curriculum innovations and research in the area of Numeracy.

### **Role of the Teacher**

The development of mathematics is an integral part of the School Development process and all members of staff have a responsibility in the development of learning and teaching in Mathematics. It is the policy of the school that teachers are encouraged to continually develop their own knowledge base and skills through collaboration and in-service training.

The teacher's role is to:

- Build up a caring, trusting and supportive relationship where different points of view are listened to and self-esteem is developed.
- Be flexible in approach; and to be sensitive to differences in children's learning styles and rates of learning
- Be committed and enthusiastic in order to create a positive relationship with pupils which will encourage learning.

- Planning their class curriculum in accordance with the Northern Ireland Curriculum and school policy.
- Be aware of the need for progressive planning across the curriculum, differentiating where appropriate to meet the needs of all pupils
- Evaluate daily mathematical lessons, review weekly progress and overall performance at the end of each mid-term.
- Use effective questioning to promote and encourage all aspects of learning and application of different mathematical strategies
- Be positive and avoid negative responses to children's contributions
- Monitor, track and evaluate children's progress.
- Complete whole class analysis of PTM results focusing on Curriculum Content, Process Categories and movement across Stanine Bands (P3- P7)
- Complete data analysis and target setting for all children in the year group and identify actions to be taken i.e. target group or IEP. (P3 – P7)
- Devise targets for children on IEP's, set short -term targets for identified individuals and long term objectives for the class as a whole.
- Take part in the process of internal moderation and report on individual pupil levels.
- Direct and support classroom assistants to work with individuals or small groups.
- Liaise with the Special Needs, Literacy and Assessment Co-ordinators.

#### **A School Connected to its Local Community:**

The following indicators from ESaGS will be reflected in the school's approaches:

- 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.
- The school uses its involvement in particular programmes (for example Extended Schools or Specialist Schools) effectively in meeting the needs of the community and nearby schools.
- Good relationships and clear channels of communication are in place between the school and the education agencies that support it.
- The school works closely with other relevant statutory and voluntary agencies whose work impacts on education, especially Health, Social Services, the Public Library Service and, where appropriate, local Neighbourhood Renewal groups.

We believe that the education of our pupils is a collaborative enterprise involving teachers, parents, pupils and the wider community. Regular and positive communications are made between teachers and parents, on a formal and informal basis.

#### **Involvement of Parents and Carers**

- We aim to harness support from home and to stimulate greater support in order to enhance children's numeracy.
- Parents are encouraged to actively support their children's learning at home.
- Parents receive clear information about policies, the curriculum and ways in which to support their children.
- Our school will hold Welcome Meetings from September 2018 - give parents an outline of the Numeracy Curriculum for that year group. In November parents have feedback on their child's

performance as well as an opportunity to discuss their child's overall progress in school. Parents are offered a second parent meeting in the second term to discuss their child's progress.

- Parents are encouraged to take an interest in their child's homework, as this will also help them appreciate the level of their child's work and progress. Class teachers are available to discuss children's mathematical progress with parents and carers and to offer advice and support when required at any stage in the school year.
- Parents or Carers receive an end of year report detailing progress and achievement in Numeracy.
- Certain children may require an Individual Education Plan in aspects of Mathematics, teachers and parents will discuss and review short-term progress each term. (Reference Special Needs Policy)
- RVIPS Parents and Friends Group hold regular fundraising events to support and raise funds for school resources.
- Roe Valley IPS parents show their support when our pupils have been involved in fundraising or enterprise projects e.g. during Money Week or the P7 Healthy Tuck Shop.

### **Community links**

Contacts with the local community, including other schools, are established to help foster positive attitudes and values among the children. For example:

- Roe Valley IPS has developed strong links with banks and organisations in our local area.
- Local businesses have accommodated ordering and delivering of produce for the Tuck Shop.
- We have joined with local schools and offered joint training to others when CEA/other agencies have offered training e.g. the Role of the Co-ordinator and Financial Capability.
- Visits to local businesses
- Links with other integrated schools e.g. Mathematics Cluster Group
- Events with other schools, e.g. sporting events
- Links with pre/post primary schools (transition)

Effective links are maintained with statutory agencies including educational support services, e.g. psychology, behaviour management team, CASS, ASD team, speech and language therapists, etc.

### **Monitoring and Evaluation of Policy**

We shall be reviewing different areas of mathematics and considering further development in light of the full implementation of the Northern Ireland Curriculum. As staff reflect on each aspect- Measures, Number, Shape and Space, Data Handling alongside Using Mathematics- small adjustments will be made to the policy as required.

The Numeracy policy will be

- regularly reviewed and updated in consultation with staff, particularly SLT and SENCO
- presented to the BOG regularly
- shared with parents
- in line with whole school learning and teaching policy.