



**Castle Tower School**

## **Primary Dept. Numeracy Policy**

Date Ratified by Board of Governors	
Review Date	

Castle Tower welcomes pupils aged 3-19 who face a wide range of barriers to learning. Educational opportunities are provided within our Nursery, Primary, Secondary and Post 16 departments.

## **Our Vision**

### **Vision:**

To be a leading light in special education through educating, nurturing and inspiring all our school community.

### **Mission:**

Castle Tower School is committed to creating a community which:

- Ensures everyone is safe and included
- Always learns
- Promotes independence and resilience
- Celebrates achievements
- Looks forward with hope to the future

Everything we do is driven by our core values:

- Child-centred
- Nurturing
- Fun
- Team work
- Inclusive
- Independence

## **Our Ethos**

Castle Tower strives to create a caring community in which every member feels valued, supported and happy. All staff work to maintain an ethos in which fairness, tolerance, compassion and forgiveness permeate all relationships within the school community. High standards of respect, self-discipline, commitment and sensitivity are sought and everyone is encouraged to set and achieve the highest personal, academic and social goals. The safety, welfare and development of everyone in our school community is of paramount importance to all staff and Governors.

At Castle Tower, there is continued development of the quality of the teaching and learning environment. Resources are used efficiently. Opportunities are created for learning in co-operative and interactive settings. Pupils are presented with challenging as well as stimulating teaching and learning opportunities. Staff at Castle Tower seek close working relationships with other providers and services throughout each stage of our pupil's education and through the transition stage to further education and life after school.

## **Rationale**

In Castle Tower School we teach Numeracy as an element of our core curriculum. We focus on developing the functional Numeracy skills that our children will require to in daily life. Our pupils are provided with opportunities and practical learning activities focused on supporting them to reach their full potential.

In Castle Tower School we share the belief that:

- The term numeracy does not merely apply to skills in number but encompasses many areas of daily living.
- The development of numeracy skills and competence is a basic entitlement for all and necessary to gaining independence.
- All pupils, regardless of intellectual ability and/or Special Educational Need, should experience a rich numeracy learning environment.
- Mathematics and Numeracy involves the application of knowledge, skills and understanding essential for everyday life, and for lifelong learning.
- All staff should endeavour to promote numeracy in a manner that builds pupils' self-esteem.
- Mathematics should be promoted through purposeful, relevant and enjoyable activities.
- Numeracy activities should provide both a challenge and a sense of achievement for all pupils.
- Competence and understanding in numeracy is important for progress in other areas of life.
- Numeracy is the responsibility of all teachers and there should be a shared vision for numeracy within the school.
- There should be high expectations for numeracy development in our school.
- Pupils' competences in numeracy should be improved by developing knowledge and providing a range of life experiences.
- Pupils should be provided with functional numeracy experiences inside and outside of the classroom, in the wider community.

## **Aims**

In the Primary Department of Castle Tower School we value every pupil and aim to ensure that every child achieves success. We aim to ensure that all children are enabled to develop their skills in accordance with their level of ability and Special Educational Need.

### **The differentiated programme for Numeracy will encourage pupils to;**

- Actively engage and enjoy Numeracy.
- Gain confidence and build self – esteem by achieving success in Numeracy activities.
- Use numeracy effectively in a range of practical scenarios.
- Work on developing the ability to think logically.
- Work on developing perseverance, confidence, independence and co-operation with others.
- Raise standards within the school.
- Foster an understanding through a process of enquiry and experiment; and communicate them in a variety of modes.
- Develop mastery of basic mathematical skills and knowledge;
- Acquire an appreciation of the ways Numeracy is used in real- life.
- Consider the use of ICT in supporting the teaching and learning of Numeracy.
- Develop the skills to communicate effectively through the medium of mathematics by using its language, symbols and diagrams with increasing confidence and fluency.
- Work alongside parents/carers so they can become more involved in their children's learning.
- Promote the ability and inclination to solve problems and develop financial capability.
- Develop the knowledge, skills and understanding needed to apply a range of Numeracy concepts to situations which may arise in their own lives

## Specific Aims

### Nursery and Foundation Stage

*children working below level one across the curriculum:*

- Develop much of their early mathematical skills through play.
- Engage in activities that build knowledge and understanding in the areas of measure, money, shape/ space & handling data.
- Begin to develop functional Numeracy concepts through play activities that involve sorting and matching. Comparing, classifying and making patterns and sequences in a variety of contexts.
- Develop an understanding of mathematical language through routines, talking, listening and attention development activities.
- Begin to develop mental Numeracy skills during counting, games and classroom routines.
- Begin to estimate and make simple predictions.
- Explore a wide variety of materials through play.

### KS1 & 2

- Continue to develop mathematical skills through play appropriate to cognitive ability.
- Continue to engage in activities that build knowledge and understanding in the areas of measure, money, shape/ space & handling data.
- Continue to develop mental Numeracy skills-estimate, investigate and make simple predictions based on every day experiences
- Develop mental methods of calculation through every day, practical activities.
- Explore money and begin to take part in practical experiences spending and budgeting.
- Promote thinking skills and capabilities through practical Numeracy activities within and outside of the classroom.
- Begin to have experiences of Numeracy in the community that will promote independence.

### Role of the Numeracy Coordinator

In Castle Tower School there are two co-ordinators for mathematics and numeracy, one for Early Years and Primary which includes Nursery, Foundation Stage, KS1 and KS2 and a second co-ordinator for Secondary. Both co-ordinators have a team of staff designated to assist them.

As a staff we recognise the responsibility which each of us has in developing Numeracy, however, the co-ordinators are responsible for the development of Numeracy throughout the school, including an evaluation of the effectiveness and fitness for purpose of the learning process within the school's provision. Co-ordinators ensure that they are informed about developments in their area of study, taking advice and training as necessary. They lead the planning and development of teaching and learning through advice and INSET for all members of staff. This can involve the use of both internal and external trainers.

The Leadership Team in Castle Tower School oversee mathematics.

Co-ordinator meetings are arranged to monitor the development and progression of Numeracy throughout the school.

The Numeracy co-ordinator will assist the Leadership team by updating the school's Mathematics policy in the context of the School Development Plan.

### **Teaching Strategies**

The school does not rely solely upon one scheme as it is felt that this would limit our pupils' mathematical learning. We aim to give our pupils a variety of functional learning experiences. These include:

- Play in the Primary years
- Sensory based activities
- Sorting and matching.
- Comparing, classifying, making patterns
- Games and puzzles
- Music and rhymes
- Use of ICT; Clevertouch interactive screens and Ipads
- Problem-solving,
- Investigations,
- Practical activities
- Real life scenarios
- Estimation
- Utilising whole school facilities
- Participating in activities in our community

The teaching strategies used include primarily practical activities, individual, paired, group and in some instances whole class teaching. These teaching strategies will take into account:

- the level of understanding of the pupil,
- the sensory needs of the pupil,
- the ability of the pupil,
- previous experience of the pupil
- the nature of the topic,
- available resources,
- differing learning styles,
- individual learning needs which reflects within PLPs.

**In Castle Tower School the Numeracy programme will be delivered by teachers, supported by Classroom Assistants to:**

- Focus on functional Numeracy.
- Using a range of approaches, resources and equipment.
- Incorporating a variety of teacher produced and commercially available resources.
- Utilising Information Technology.
- With a strong emphasis on pupils learning through functional and relevant play and practical activity.
- Creating a learning environment and play opportunities where pupils are encouraged to increase independence.
- Employing methods which enable them to identify and facilitate different levels of ability, attainment and progress.
- Making use of real-life opportunities including learning in the outdoors and in the community.

### **Programme of Work**

Rather than prescribe a set programme of work for each year group (which is unrealistic considering the wide variation of ability and SENs within any year group,) it is considered more appropriate to present the programme of study as a continuum within each area of Numeracy. Individual pupils can be placed on this at an appropriate point and allowed to progress at a pace suited to their individual skills and learning difficulties.

Our Programme of Work follows the progression recommended from the Golden Book (NI Primary Curriculum) and/or appropriate; Quest, Lines of Development, Levels of Progression, Q skills. This variety of context is particularly useful for allowing whole class teaching of a topic, differentiated to suit different levels of ability and/or individual learning needs according to each IEP.

### **Resources**

A wide range of resources are available for the teaching and learning of Numeracy. These are now kept in a central store in the Primary department. All teachers have access to this and there are 'Sign Out' sheets to monitor the use and whereabouts of resources.

Such equipment includes:

Numicon  
A range of blocks  
Matching, puzzles & jigsaws  
Cuisenaire rods  
Magnetic number boards  
Number fans and number generators  
Sand & water, tough trays (FKS1)  
Coins and coin stamps  
Multilink  
Numeracy Magnetic Board and accompanying overlays  
Giant Connect Four  
2D and 3D shapes  
Geared plastic and other clocks

Mathematical games  
Measuring cylinders and beakers  
Weight scales and two pan balances  
Trundle wheel and other measuring equipment

The department also has a bank of additional teacher-produced resources which have been adapted from main stream resources to meet the needs of our learner. Teachers work together in year groups, planning functional, rich and challenging Numeracy experiences. They share expertise, experience and resources.

A range of mathematical software is available on class iPads and Clevertouch screens. Teachers are encouraged to research, download and share knowledge on Apps, games and resources that are appropriate and beneficial.

### **Assessment**

Pupils engage in a variety of play-based and functional numeracy activities, with initial assessments conducted through observation in September. These assessments are play-based and aligned with Q-skills and Quest levels. Where suitable, assessments are also informed by the Northern Ireland Curriculum. Pupil progress is continuously monitored, and learning activities are adapted accordingly. All work is tailored to each pupil, ensuring it is both achievable and suitably challenging to promote development.

Functional numeracy targets within each pupil's Personal Learning Plan (PLP) are developed in collaboration with parents, who are invited to share their priorities for their child's learning focus. In the third term, teachers write end-of-year reports and review PLP targets. Each pupil's progress in numeracy is documented and shared with their next teacher to support continuity.

For pupils with Moderate Learning Difficulties, appropriate assessments may include the PUMA test from Hodder Education. Teachers may also use school-based assessments such as the Pre-Numeracy Test 1 and Numeracy Test 2, depending on individual needs.

Assessment practices are regularly reviewed and updated in alignment with the School Development Plan. In the upcoming year, the Primary Department will be trialling a new programme for recording progress – Evidence for Learning.

### **ICT**

In the Primary Department, we are acutely aware of the high levels of screen time many of our pupils experience, which in some cases has developed into a dependency. We recognise the potential negative impact that excessive use of ICT and screen-based activities can have on learners. At the same time, we acknowledge the educational value of well-designed, engaging apps. Therefore, we advocate for a balanced and thoughtful approach to ICT use—employing it in moderation and only when it clearly supports and enhances pupil learning. Each use of technology should be purposeful, with its benefits carefully considered.

Each class has a set of iPads and a Clevertouch interactive screen. The use of the Wize floor in school can also be integrated into Numeracy lessons with various interactive applications available.

### **Home Learning & Parental Involvement**

Traditional numeracy homework is not compulsory in the Primary Department. Instead, parents are kept informed about the functional numeracy targets their child is working on in school. They are encouraged to support their child's learning in two key ways: first, by helping to identify meaningful and achievable targets that promote independence; and second, by reinforcing classroom learning through everyday activities at home. This approach ensures that numeracy skills are developed in both school and real-life contexts.

### **Monitoring & Evaluation**

The role of the co-ordinator includes the monitoring and evaluation of functional Numeracy teaching within Nursery, Foundation, Key Stage 1 and Key Stage 2. This happens in a number of ways:

- An initial audit of Numeracy within different subject areas (ongoing) to ascertain what is being delivered with a view to designing a Numeracy Curriculum Map.
- Reviewing teacher planners (available on Shared Documents) to stay abreast on how numeracy is being delivered.
- Collecting evidence (photographs, videos etc showing teaching methods in practice in the classroom. Disseminating good practice to teachers.
- Occasional Classroom Observations (This is an area which we hope to develop in the future.)
- Resourcing the Numeracy store- researching, purchasing and storage of new and existing resources.

### **Staff Development**

It is school policy that teachers are encouraged to continually develop their knowledge-base and skills through collaboration and in-service training. Teachers are also encouraged to research in order to stay abreast of the latest developments in delivering Functional Numeracy to children with SEN.

Our focus is on **Functional Numeracy** The opportunity for real-life Numeracy skills should be developed to improve the confidence and life chances of our pupils. Staff need to adapt their teaching and learning strategies to meet the everchanging differing needs of the children in their class.