Scoil Aonghusa
Special National School

Scoil Aonghusa Mathematics Policy

Introduction

Scoil Aonghusa Special School recognises the importance of Mathematics in developing essential life skills and supporting cognitive development. This policy outlines our approach to teaching Mathematics in line with the Primary Mathematics Curriculum while ensuring accessibility for all learners. The curriculum is adapted to meet the needs of children with Moderate General Learning Disabilities, Severe & Profound General Learning Disabilities, and Autism.

Aims

At Scoil Aonghusa, we aim to provide a meaningful, engaging, and practical Mathematics education that supports pupils in developing essential skills for daily life. Our approach ensures that pupils build confidence, think critically, and apply their learning in real-world situations.

Our key aims for Mathematics teaching and learning are to:

- Develop a strong understanding of mathematical concepts and their everyday applications.
- Foster problem-solving, reasoning, and critical thinking skills.
- Support pupils in applying Mathematics to daily life, including managing money, measuring, and interpreting information.
- Encourage mathematical communication through verbal, visual, and written means.

- Promote independence and perseverance in tackling mathematical challenges.
- Provide a stimulating and hands-on learning environment that nurtures curiosity and creativity.
- Use technology and digital tools to enhance learning and engagement.
- Ensure pupils experience success and enjoyment in Mathematics, building confidence in their abilities.

These aims guide our approach to Mathematics across both the Primary and Junior Cycle curriculum, ensuring all pupils receive relevant, accessible, and enriching mathematical experiences at Scoil Aonghusa.

Teaching and Learning Strategies

At Scoil Aonghusa, Mathematics is taught using a multi-sensory, hands-on approach to ensure all students can engage at their level. Teaching strategies include:

Use of concrete materials such as counting cubes, number lines, and money.

Visual supports, including charts, diagrams, and digital resources.

Structured play and real-life problem-solving tasks.

Individualised learning programmes tailored to each pupil's needs.

Technology integration using tablets and interactive whiteboards.

Peer and group work to encourage social interaction and shared learning.

Frequent revision to consolidate skills.

Assessment

Mathematics assessment in Scoil Aonghusa is ongoing and includes:

Baseline and Summative Assessments.

Observational Assessments: Teacher observations of engagement and participation.

Work Samples and Portfolios: Collection of student work, including worksheets, recorded activities, and photographs.

Differentiation and Inclusion

Mathematics teaching is differentiated to ensure all pupils access the curriculum at an appropriate level. Differentiation strategies include:

Using visual schedules and structured routines.

Providing step-by-step instructions and guided practice.

Modifying lesson content to match individual learning styles.

Allowing additional processing time and using assistive technology where needed.

Providing alternative forms of expression, such as verbal responses, communication devices or practical demonstrations.

Application of Mathematics to Daily Life

At Scoil Aonghusa, we make every effort to connect Mathematics to real-life experiences, ensuring that pupils can apply their learning in meaningful and functional ways. Mathematics is embedded in daily school activities, helping pupils develop essential skills for independence. This is done through:

- Shopping Trips & Social Outings - Handling money, making choices, budgeting, reading prices, and counting change.
- Cooking Lessons - Measuring ingredients, following sequences, estimating portion sizes, and setting timers.
- Physical Education - Counting repetitions, measuring distances, tracking progress, using stopwatches, and scoring games.
- Time Management Activities - Using schedules, calendars, and timers for transitions, waiting, and turn-taking.

- Celebrating Special Occasions – Counting candles on birthday cakes, planning class events, and using Maths in festive activities (e.g., counting Easter eggs, measuring ingredients for Christmas baking).

- Play-Based Learning – Exploring capacity through water play, sand play, and playdough, recognising patterns in block building, and using shape sorting activities.

- Music & Rhymes – Engaging with number songs and rhythm-based activities to reinforce counting and sequencing.

- Developing One-to-One Correspondence – Matching activities, setting the table, handing out materials, and organising personal belongings (e.g., hanging coats and bags on the correct hook).

- Classroom Routines – Counting classmates, distributing materials, identifying shapes in the environment, and structuring daily schedules.

- Outdoor & Sensory Learning – Measuring plant growth, counting objects in nature, sorting items by size, and following directional language (e.g., left, right, beside, under).

By embedding Mathematics in practical, real-world activities, we help pupils develop the confidence and skills they need to apply numeracy to their everyday lives.

Resources

The school provides a variety of resources to support Mathematics teaching:

Textbooks.

Numicon.

Digital tools such as iPads, interactive whiteboards, and educational apps.

Concrete materials such as clocks, scales, timers, measuring tapes, rulers, metre sticks, trundle wheels, sorting trays, counters and other manipulatives.

Mathematical Approaches and Strategies in Scoil Aonghusa

The Primary Mathematics Curriculum is taught in Scoil Aonghusa. Students in Scoil Aonghusa at Junior Cycle study the Level 1 Learning Programme or the Level 2 Learning Programme. Students commence their Junior Cycle studies during the school year in which they turn 13.

Primary Curriculum

Algebra	Use coloured beads (threading activity), or pegboards to extend repeating patterns. Action Sequences – Create movement patterns (e.g., clap, jump, tap, clap, jump, tap) and ask pupils to continue the sequence. Match: object to object, object to picture, picture to picture. Matching Colours – Pupils match coloured objects to copy simple patterns (e.g., red-blue-red-blue). Inset puzzles. Explore and Create patterns through movement songs, e.g. Hop little bunny Threading- using coloured beads create a pattern. Peg boards- extend a pattern. Copy and anticipate everyday sequence patterns e.g. take off coat, hang up coat and put away your bag. Use Computer programmes that involve copying and continuing patterns, e.g. Topmarks. Reciting numbers forwards and backwards. Listen to number stories e.g. Ten in the Bed Matching colours- coloured items into coloured bowls. Matching symbols to sets- e.g. match a coloured card with the number 3 to a set of three items. Action rhymes and songs to create movement patters e.g. If You're Happy

	and You Know It, Head, Shoulders, Knees and Toes. Combine sets- put all the red bears together and all the blue bears together. Shoebox activities.
Data and Chance	Sorting objects: Sort animals into zoo animals and farm animals, match socks, sort objects according to size, colour etc. Circle time games- swap places if you have blonde hair. Count how many children have blonde hair and show on a chart (graph) Celebrating birthdays and special occasions. Roll a dice for movement breaks- e.g., roll a 5 do 5 jumping jacks. Count how many times the dice landed on 5. Record how many students are in school today during circle time and show on the board. Favourite Things Picture Graph – Pupils indicate their favourite colour, animal, food, drink, song, TV programme and results are displayed on bar charts. Reward charts - recording achievement. Rolling Dice Experiments – Pupils roll giant dice and record the results using bingo markers in a tally chart to explore probability. Sorting Objects – Pupils sort a collection of toys, buttons, or shapes into groups and count them. What's in the box? game Lucky Dip Exercises game – Place different activities in a bag, let pupils pick one, and that can be their movement break that day.
Measures	Estimating and Measuring Length – Use

	lollipop sticks to measure classroom objects. Estimate first where possible. Spooning/pouring activities. Time Matching Game - Match clock faces showing different times. Use balance scales to compare the weight of objects and guess which is heavier or lighter. Cookery. Time- develop an awareness of specific times of the day in school using the visual schedule. Discuss the days of the week during circle time. Communicate about events that happened in the past suing 'My weekend News'. Length- hand me the long ruler, the short pencil. Put teddies in order according to size starting with the smallest. Cookery- using a weighing scales weigh out ingredients. Pouring water- pour water from a cup into a jug- how many cups of water do you need to fill the jug?? Height chart- measuring ourselves each term. Balance scales. Sink or float experiment. Water play. Use of timetables and visual/tactile schedules. Use of timers.
Number	Number Hunt - Find and identify numbers in the school environment. Shoebox activities. Use of number line and 100 squares. Handling money on social outings to pay for things. Numicon. Counting with Objects - Use concrete

	objects to practise counting, adding, and subtracting. Number Matching - Match numerals to sets of objects (e.g., the number "3" to three apples). Simple Addition Sentences – using concrete objects, a number line, Numicon pieces. Interactive Number Games - Use online number games on the interactive whiteboard. Counting- using concrete objects to count and for addition. Counting in circle time- Clap all the way up to 18 for example the 18th of the month. Movement breaks- throw a dice do 4 bunny hops, etc. How many children in school today- Let's count. Interactive number games- Topmarks- give Teddy three buns. Using number lines. Matching numerals to concrete sets or pictures of sets. Combining sets- Paul has 2 cars and Ben has 4 how many altogether. Put number flashcards in order. Number jigsaws. Nursery rhymes. Games on the interactive whiteboard. Counting and number songs. Colouring the correct number.
Shape and Space	Sorting objects by colour or shape using sorting trays for concrete objects or sorting pictures. Geoboards. Jigsaws and form boards. Building with recycled materials (junk art). Tracing ourselves and our classmates.

	Searching for shapes in sand/foam. Preposition games. Develop spatial awareness through movement- dancing, yoga, Zumba. Building - Use Jenga blocks, Lego, marble run pieces, magnetic tiles to create 3D forms. Shape Hunt - Find shapes around the school. Positional Language Game - Practise "in front," "behind," "next to," and "under" using toys. Draw/Trace and cut out shapes. Shape Feel Box - guessing game. Participate in body awareness activities e.g. during circle time sing songs which involve finding or moving parts of your body e.g. elephants have wrinkle. Playtime on the track- climbing the ladder for the slide, using the spinner, swinging, glide and ride seat. Constructing 3D shapes using straws/lollipop sticks and blue tack. Develop spatial awareness and body awareness using Tac Pac. Follow instructions related to movement- e.g. throw the beanbag into the hoop. Cut out shapes and match them e.g. Twinkl activities. Sort shapes into categories- put all the circle together, etc. Use blocks and Lego to build. Creating 3D collages for display. Teaching 3D shapes using everyday objects e.g. ball- sphere.

Awareness of Environment	Going out to different places. Crayon rubbings of bricks/trees/leaves. Numbers on doors. Directions. Nature table. Trail looking for shapes and symmetry in the environment. Cause and effect activities e.g. Turing on off lights, heaters and electronics that make noise.
Pattern and Sequence	Days of the week, Months of the year. Repeating patterns- concrete objects and textbooks. Retelling story, pattern in the story. Drama activities where the characters have a pattern to their words. Music activities where they repeat pattern. Repeating and extending patterns using pegboards and threading. Interactive games on the interactive whiteboard/iPads.
Developing Number Sense	Rote counting. Making amounts with concrete objects (lots of different ones). How many do we need? when sharing out items in the class. Addition and subtraction (Concrete and written) Numicon. Counting concrete objects focusing on developing one to one correspondence. Number games using concrete objects and online games.
Shape and Space	Measuring hands /feet. Who is the tallest/shortest? How many do we need for…? How much space do we need to do this dance? Spread out etc. 2D shapes, Naming, colouring, drawing

	making pictures. 3D shapes handing, naming, making buildings etc. Using recycling to make bigger things like houses. Shape hunt in the environment. Feely bag shape guessing games. Jigsaws and inset puzzles.
Measure and data	Making graphs for who likes/ dislikes using symbols and pictures that they can physically interact with. Estimation and calculation tasks in textbooks. Collecting data, from the class and school about specific things (Made up by the class). Recognising coins, sorting coins. Going to the shop to buy items. Looking at prices of items and how much they cost. Deciding what they can buy with the money they have. Measuring using rulers, meter sticks, weighting scales.
Time	Days of the week, months of the year. Counting the days as a group for where we are in the month. Activities using analogue clocks/digital clocks. Circle time- learning about time, the passing of time covering the days of the week, months of the year, daily routines e.g. morning routine, bedtime routine. Class schedule writing and pictorial. Remembering what we do on each day and what do they have to remember to bring in to school. Analogue Clock (O clock and Half Past). Physical timers and digital timers on the interactive whiteboard.

Level 2 Learning Programme

Managing Money	• Completing transactions on social outings. • Class shop using real money. • Weekly shopping trips. • Deposit return scheme. • Counting coins. Role-play activities for shopping and handling money. Piggy banks. Interactive whiteboard activities. Using class tokens for small purchases (e.g., snack shop). Matching coins to prices of familiar items. Identifying and sorting coins and notes.
Developing an awareness of number	• Maths book activities. • Hundred square work. • Scoring in basketball/soccer/table tennis. Counting everyday classroom items (e.g., pencils, chairs). Number bingo with visuals. Matching numbers to quantities (e.g., placing blocks on the number 33). Ring toss and darts games- totting up the score. Skip counting for multiplying. Circle time and interactive whiteboard/iPad activities.
Developing an awareness of temperature	• Discussion of weather during circle time. • Home Economics with Mary Anne. • Comparing temperature in different countries. Discussing daily weather and matching temperatures to seasons. Simple thermometer activities (hot vs

	cold comparisons). Daily temperature checks, keeping a record. Cookery. Cooking/baking integration: measuring temperature of ingredients. Comparing temperatures from different places.
Developing an awareness of weight and capacity • Water play. • Home Economics with Mary Anne. • Examining weight and capacity as provided on various food and drink items.	Using weighing scales to measure various classroom items. Using weighing scales with classroom objects. Science activities e.g. Lava lamps, tornado in a bottle, shake bottles. Cookery. Water play activities to explore capacity. Estimating and measuring weights of small classroom items.
Developing an awareness of length and distance • Measuring distance for athletics. • Estimating length and distance. • Drawing lines of various length for art • Measuring classroom objects with different tools (ruler, measuring tape, hands).	Measuring items using ruler, measuring tape and trundle wheel. Simple estimation games (e.g., "Is the book longer than the pencil?"). Movement-based distance activities (e.g., counting steps across the room). Swimming and athletics - running or swimming for distance.
Using a calculator • Calculating bills.	• Calculating price of various items from catalogue.

	• Calculator challenges and games from whiteboard. • Checking own/partners answers to maths problems using calculators. Pressing numbers to match written digits. Simple calculator challenges (e.g., typing in a number sequence). Addition and subtraction sums.
Developing spatial awareness	• Games in hall to develop spatial awareness e.g. turn left, walk three paces, turn clockwise, etc. • Following instructions from staff to complete jobs in various locations around the school grounds. • Dance classes. Simple movement instructions (e.g., "Take two steps left"). Following directions on a classroom treasure hunt. Dance-based activities to reinforce movement in space. Construction using blocks, Lego, Jenga. Puzzles: form boards, jigsaws.
Using data for a range of purposes	• Creating a tournament for staff. • School/class surveys ad voting. • Scoring in sports. Tallying simple class data (e.g., favourite colours, pets). • Sports-related counting (e.g., scoring goals, tracking laps). • Question of the Day.
Using shapes	• Sorting shapes. • Labelling shapes in our environment. • Lego play. Jenga. Making 3D shapes with straws, blue tack Tracing/Drawing and cutting out shapes.
Developing an awareness of time	• Following timetables.

	• Using egg timers, countdown timers. • Identifying birthdays of all students on calendars. Matching months to seasons. Circle time- daily calendar work. Clock work- real clock and interactive whiteboard activities.

Review and Implementation

This policy will be reviewed annually to ensure it remains responsive to the evolving needs of our pupils. Adjustments will be made based on teacher feedback, student progress, and new developments in special education.

This policy was ratified by the Board of Management on;

Date: 8th April 2025.

Signed: David Barry

David Barry,
Chairperson,
Board of Management,
Scoil Aonghusa.