



Pensans ARB

Maths Curriculum Statement

"Learning for Life"

At the heart of our Mathematics curriculum is the belief that every pupil can develop confidence, competence and enjoyment in mathematics. Within our ARB, we provide a personalised, inclusive and ambitious mathematics curriculum that enables children to make meaningful progress from their individual starting points while fostering independence and preparing them for everyday life.

We recognise that our pupils have diverse learning profiles and needs. Through carefully adapted teaching approaches, practical experiences and targeted support, we ensure that mathematics is accessible, engaging and relevant for all learners.

At Pensans ARB we teach Maths in a way which excites and engages children in the National Curriculum, this allows them to apply their skills in a practical and 'real world' way and make links between numeracy and their learning in other areas such as topic. We prioritise the skills which will enable children to be as independent as possible and develop life skills, such as time, money and basic calculations.

To do this we use concrete and visual resources, embedding and mastering the important skills needed to make the next steps in their learning. Teachers set clear next step targets which we share with the children and home each half term. These targets also help us to ensure all children's learning is individualised for their needs.

Our mathematics curriculum aims to:

- Develop pupils' understanding of number, quantity, shape, space and measure through practical, hands-on experiences.
- Build confidence and resilience when solving mathematical problems.
- Promote mathematical communication through the use of visual supports, concrete resources, symbols, vocabulary and alternative communication systems where appropriate.
- Enable pupils to apply mathematical skills in real-life situations to enhance independence and preparation for adulthood.
- Foster curiosity and enjoyment in mathematics through engaging and meaningful learning opportunities.

- Ensure pupils access a broad and balanced mathematics curriculum that is appropriately adapted to meet individual needs while maintaining high expectations.

Mathematics teaching within the ARB is delivered through a highly personalised approach that combines specialist teaching strategies with opportunities for inclusion within mainstream classes where appropriate.

Teaching is characterised by:

A Concrete-Pictorial-Abstract Approach

Pupils develop mathematical understanding through:

- Concrete resources and manipulatives.
- Visual representations and pictorial models.
- Abstract mathematical concepts and symbols, introduced at an appropriate pace.

Personalised Learning Pathways

Learning objectives are adapted to ensure success while providing appropriate challenge. Staff use assessment information to identify next steps and set meaningful targets that build upon pupils' strengths and areas for development.

Communication-Centred Practice

Mathematical language and vocabulary are explicitly taught and reinforced using:

- Visual supports
- Makaton and sign-supported communication where appropriate
- Communication boards and AAC systems
- Structured opportunities for discussion and reasoning

Real-Life and Functional Mathematics

Pupils are supported to apply mathematical skills in authentic contexts, including:

- Money and budgeting
- Time and sequencing
- Measuring and cooking
- Shopping activities
- Problem-solving in familiar environments

Sensory and Engagement-Based Learning

Where appropriate, mathematical concepts are introduced through sensory exploration and play-based approaches that support engagement, understanding and retention.

Through our mathematics curriculum, pupils will:

- Develop secure mathematical knowledge and understanding from their individual starting points.
- Become more confident and resilient learners.
- Communicate mathematical thinking using a range of methods.
- Apply mathematical skills in everyday situations.
- Increase their independence and participation within school and the wider community.
- Experience success and enjoyment in mathematics.
- Be prepared for the next stage of their learning and future life opportunities.

Progress is measured through ongoing assessment, observation, pupil outcomes, individual targets and evidence of mathematical application across a range of contexts.

We believe that all pupils are mathematicians. Our curriculum celebrates individual achievements and removes barriers to learning through reasonable adjustments, appropriate scaffolds and personalised support. We strive to ensure every child can participate, achieve and develop a positive attitude towards mathematics, both within the ARB and across the wider school community.

"Mathematics for understanding, independence and life."

Practical Mathematics in Action

We believe pupils learn mathematics best when they can experience concepts through practical, hands-on activities that are meaningful and linked to real life. Learning opportunities are carefully planned to develop both mathematical understanding and independence skills.

Examples of practical mathematics activities include:

Number and Place Value Counting objects during snack preparation and classroom routines. Matching, sorting and grouping everyday items. Number hunts around the school environment. Singing number rhymes and action songs. Using construction materials to build and compare quantities.	Calculation Sharing food equally during cooking activities. Using role-play shops to practise adding and subtracting money. Solving practical problems during play and outdoor learning. Taking part in team games that involve scoring and recording totals.	Money Running a class shop or café. Shopping trips within school or the local community. Identifying coins and notes through sorting and matching activities. Comparing prices and selecting items within a budget.	Time Following visual timetables and daily schedules. Using sand timers and stopwatches during activities. Sequencing events throughout the school day. Practising telling the time through real-life routines such as breaktimes and home time.
Measure Measuring ingredients during cooking sessions.	Shape and Space Shape hunts in classrooms and outdoor areas.	Statistics and Data Handling Conducting simple class surveys. Recording favourite fruits, colours or activities.	Functional and Life Skills Setting tables and counting equipment.

Comparing the weight of objects using balance scales. Measuring plant growth in outdoor learning. Exploring capacity through water and sand play.	Building models and structures with construction resources. Following directional language during obstacle courses. Creating patterns using natural materials, art resources and loose parts.	Creating pictograms using real objects and photographs. Collecting weather data and presenting findings visually.	Organising personal belongings. Following recipes and measuring ingredients. Planning journeys around school and the local community. Managing simple budgets during enterprise or fundraising activities.
---	---	--	---

Enrichment Opportunities

Mathematics is further enhanced through:

- Outdoor learning sessions.
- Cooking and food technology activities.
- Cross-curricular learning linked to topics and special events.
- Collaborative activities with mainstream peers to promote inclusion and communication.

These practical experiences help pupils see mathematics as an essential life skill, supporting problem-solving, decision-making, communication and independence both in school and beyond.

Resources Used to Support Mathematical Learning

To promote engagement, understanding and independence, pupils access a wide range of practical resources tailored to individual learning needs.

Number and Calculation Numicon Counters and sorting objects Unifix cubes and linking cubes Tens frames and five frames Bead strings Number tracks and number lines Multi-link cubes Base 10 resources (Dienes) Digit cards and symbol cards Interactive maths games	Shape, Space and Measure 2D and 3D shape sets Geoboards Pattern blocks Measuring tapes and rulers Balance scales Weighing scales Capacity containers Water and sand trays Construction materials (Lego, Duplo, wooden blocks)	Money Real and plastic coins and notes Class shop resources Toy cash registers Shopping baskets and role-play equipment Price labels and catalogues Vending machines in school where available	Time Analogue and digital clocks Visual timers Sand timers Countdown timers Class visual timetables Daily routine boards Calendar displays
Data Handling Pictogram resources Tally charts Large floor graphs Voting stations Interactive whiteboard software Photographs and picture symbols	Communication and Accessibility Makaton signs Widgit symbols Communication boards Visual prompts and task cards Colour-coded resources Now-and-next boards AAC devices where appropriate Social stories linked to mathematical concepts	Sensory Resources Sensory counting objects Natural materials (sticks, stones, leaves, shells) Playdough for shape exploration Light box resources Water and sand play equipment Sensory trays Tactile numbers and shapes	Technology Interactive whiteboards iPads and tablets Maths apps (e.g. Number blocks, White Rose 1-Minute Maths) Talking calculators Bee-Bots and programmable toys to develop positional language and problem-solving Digital weighing and measuring equipment

Outdoor Learning Resources

We use the outdoor environment as an extension of the classroom. Resources include:

- Giant number lines
- Chalk and playground markings
- Counting frames
- Obstacle course equipment
- Gardening tools and measuring equipment
- Natural loose parts
- Outdoor construction resources
- Large-scale shape and pattern resources

These resources enable pupils to explore mathematical concepts in meaningful contexts, supporting communication, independence, problem-solving and confidence whilst ensuring all learners can access the mathematics curriculum successfully.

Pensans ARB Maths Curriculum Yearly Overview

Team	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Continuous focus - Number and place value						
Porthmeor Pathway 1 and 2 learners	Calculation- Addition	Calculation- Subtraction	Doubling, Halving And Sharing	Addition	Subtraction	Doubling, Halving And Sharing
	Shape	Time	Measure – size, length and height	Shape	Money	Measure – weight and capacity
Porthminster Pathway 1, 2 and 3 Learners	Time	Addition and subtraction within	Position and direction	Fractions	Multiplication and division	Capacity
	Place Value	Money	Weight	Statistics	Length and height	Shape

Number

Place value

Geometry

Measure

As maths builds on previous skills/understanding the programme of study year identified will depend on the level and understanding of each child, and should be determined by ongoing assessment and the appropriate programme of study followed regardless of the class or year group the child is in.