

Mathematics - the curriculum at Middleton School is designed to prepare pupils for the next steps in their learning journey and for an independent life as young adults. The mathematics curriculum is delivered through a practical approach and engages pupils at a full range of cognitive levels. The mathematics curriculum is delivered through four strands. All four strands are taught through discreet mathematics lessons as well as in a cross curricular manner. Through a sensory approach to learning, we encourage pupils to develop their numeracy skills through investigation, enquiry and play.





Learning for Life

INTENT - We aim for our pupils to:

Develop confidence in their own ability, work effectively as part of a team, find solutions and prepare for the next steps within their education and future potential employment.

NUMBER:

- Recognise and identify numbers (to ten, to twenty, to one hundred and beyond)
- Record numerals in a range of mediums
- Identify more and less.
- Match quantities to numerals.
- Demonstrate 1;1 correspondence.
- Count aloud.
- Understand that the final number counted is the total.
- Recognise familiar mathematical signs and symbols.
- Understand that addition means that the total will increase.
- Understand that subtraction means that the total will decrease
- Understand and recognise place value.
- Explore multiplication and division.
- Read and record numbers in word form.
- Use their numerical skills in a series of real life situations.
- Develop numerical confidence and fluency.
- Solve a range of mathematical problems within everyday life.
- Use number skills across a range of curriculum areas and variety of tasks.

<u>INTENT -</u>

Measure

- Understand and use a range of appropriate measure related vocabulary.
- Use a range of familiar tools.
- Make comparisons.
- Make predictions.
- Understand the importance of both estimation and accuracy in measure tasks.
- Use measure skills to explore a full range of curriculum activities.
- Recognise standard and non standard units of measure.
- Know which type of measure is required to complete a task.
- Measure the passing of time across a range of durations (years/days/hours etc)
- Use money effectively in practical situations

Geometry

- Understand and use positional language correctly
- Understand and use directional language correctly
- To identify and name a range of 2D and 3D shapes.
- To recognise familiar shapes within their environment.
- Describe the common properties of familiar shapes.
- Use their knowledge of shape to make appropriate selections and decisions in a range of tasks.
- Use geometry skills in a range of contexts to complete tasks in everyday life.

Statistics

- Sort and classify according to given criteria
- Sort and classify according to their own criteria
- Read and interpret a full range of tables and graphs.
- Record and display data appropriately.
- Develop research skills and ask appropriate questions.
- Make comparisons and draw conclusions.
- Use data for a desired purpose and change decisions or routines as a result.
- Present data, giving factual information while also aiming to affect opinion and outcomes.

Implementation -

- The Mathematics curriculum is delivered throughout the week to pupils through both dedicated maths lessons and cross curricular opportunities.
- The delivery of the Mathematics Curriculum is led by the M scale planning and assessment framework.
- A formal judgement of attainment is reported upon termly.
- Teachers use both formative and summative assessments to measure attainment and progress.
- Planning and delivery of the teaching and learning of Number is sequential in nature.
- The teaching of core mathematics concepts and skills follow a sequential plan.
- Pupils have opportunities to recall and practise skills already learnt before building upon that already acquired with the teaching of new skills.
- Number lessons are taught discreetly through departmental ability groups.
- Geometry, Measure and Statistics are taught within class groups.
- Pupil ability is assessed and groups are established so that learning objectives are linked to the relevant attainment of each pupil.
- Communication within the teaching of mathematics is supported by the use of sign and symbol.
- Pupils are encouraged to explore key mathematical concepts in practical activities at home.
- Parents/ families are invited to presentations which address how they can support their children in the development of numeracy skills.
- Regular CPD for staff and updates within the teaching and delivery of differing aspects of mathematics are planned into the staff CPD cycle.
- Intervention groups are provided for pupils who are identified as making less than expected progress.
- Mathematics lessons are delivered through a kinaesthetic and practical approach.
- Content within the mathematics curriculum is related strongly to real life situations and this is explored within the implementation of the subject.
- The subject of mathematics is often prioritised through the delivery of a focus week, which enables pupils to have practical experiences .
- All pupils are set at least one mathematics target which is reviewed by staff and pupils at least termly.
- Pupils have opportunities to practise key mathematical skills within a range of contexts, including beyond the school site.
- Pupils have opportunities to access learning individually, with a partner, as part of a small group and also as a member of a larger group.
- Key mathematics strands are moderated twice a year by the whole staff teaching team and a portfolio of exemplars is created.

Impact -

- Pupils make good and outstanding progress within their mathematics attainment when assessed against the M scale descriptors within each strand.
- Pupils are entered into the KS1 and KS2 maths SATS papers where appropriate and enjoy the challenge of this experience.
- Pupils are well prepared to transition into the next stage of their learning journey.
- Pupils who attend intervention groups make good progress as a result.
- Pupils are enthusiastic about mathematics and particularly enjoy practical learning opportunities.
- Pupils become numerate and develop a confidence in their own ability to problem solve.
- Pupils raise attainment in multiple areas of the curriculum as they make progress within their mathematics skills.
- Pupils gain greater access to, and independence within, the wider world. This is evident during offsite earning sessions, as well as practical lessons within school such as cooking. They are greater prepared for life as independent young adults.
- Pupils learn how to interpret data and gain greater comprehension of the outcomes of the data gathered. They use this information to make informed choice and decisions and to form opinions.

Enrichment Opportunities;

Assemblies and presentations, vibrant and interactive displays, offsite learning, ICT devices, Focus Weeks, outdoor trails/ treasure hunts, role play, food technology sessions, sporting events and outdoor pursuits, 3D modelling, shopping, songs, stories and poems, fundraising activities, school council.

