



## Mathematics Policy

Mathematics at Astley Park is an enjoyable and fundamental subject, equipping learners with the necessary skills for their school life and beyond.

Mathematics is taught discretely with the school adopting a two year curriculum cycle, covering elements of:

- Counting, Partitioning and Calculating
- Securing Number Facts and Understanding Shape
- Handling Data and Measures
- Calculating, Measuring and Understanding Shape
- Security Number Facts and Relationships.

Whilst the whole school are expected to follow the mathematical strands in the given order, the Astley Park Curriculum allows the opportunity for mathematics to be taught flexibly and creatively.

### Aims

At Astley Park School, mathematics allows learners to:

- Be challenged appropriately at their own level
- Be motivated by the appropriate mathematical challenges presented
- Be able to apply their mathematical understanding across the curriculum i.e. Science and ICT
- Be able to apply their mathematical understanding in real life situations.

### Curriculum Organisation

The teaching of Mathematics is taught by the class teacher with learners accessing the curriculum at their appropriate level. Throughout School mathematics is taught through a variety of different media, enabling learners to apply and consolidate their understanding of mathematical concepts. The curriculum is also tailored to suit the diversity and individuality of each learner. Examples of this learning includes

- Practical work
- Creative work
- Team work
- Individual work
- Independent learning



For example the practical elements of mathematics allows learners to see the purpose and reasoning behind mathematics. In the EYFS stage and KS1, Mathematics is taught through play and continuous provision, whereas KS4 focus on life skills i.e. reading bus timetables, budgeting etc. Creative work also arises from Mathematics through the use of art and construction, for example during the study of shape learners may be encouraged to produce collages of different shapes and construct different nets to consolidate understanding.

Across KS1, KS2 and KS3, Numicon is used to teach number concepts through a multi-sensory approach. The pedagogy behind the Numicon approach promotes that children learn best when moving from using concrete maths apparatus, pictorial representations and then abstract signs and symbols. Therefore, pupils move between concrete, iconic and symbolic representations fluently and confidently. Numicon develops number fluency through using a practical base to develop conceptual understanding and fluent recall. A focus is on developing their ability to independently select and use appropriate concrete apparatus to support their conceptual understanding and build procedural fluency.

Within the curriculum organisation of mathematics, the following applies:

- Teachers are responsible for their own medium term planning and delivery of Mathematics align with the schools agreed planning formats. Long term plans have been mapped across the school to provide consistency of coverage.
- Assessment for Mathematics is on-going and is assessed in accordance with the schools marking policy. Mathematics is assessed and reviewed at regular intervals, thus informing learners POPs. The school has adopted the assessment tool B Squared to track learner's progress regularly and throughout their school life. Number across KS1, KS2 and KS3 is assessed using a Numicon assessment tool.
- The co-ordinator is responsible for monitoring standards and quality in Mathematics.  
He /She will attend regular network meetings alongside other Mathematics Subject Leaders from SEN schools across Lancashire. The co-ordinator will work closely with other Numeracy leaders to moderate work accordingly and to be given the opportunity to feedback any relevant information to staff.

### **Equal Opportunities**

The Mathematics curriculum contains differentiated learning objectives. Teachers will provide any other, adaptations, specific teaching techniques and specialist resources required to overcome individual pupils' barriers to learning. The entitlement of all pupils to a full curriculum is acknowledged.



## **Teaching and Organisation**

Pupils are given the opportunity to work as a class, as part of a group or as individuals. The learning task or activity, the nature of the element being studied and the resources being used will determine the choice of class organisation. This applies to class-based work, practical and educational visits.

## **Assessment**

Teachers must continually assess pupils' current understanding and knowledge in order to ensure that appropriate learning targets are set through formative and summative assessment.

## **Reporting**

Progress relating to Mathematics is reported back to parents /carers at regular intervals. This includes the review of POPs, the learners Annual Review, parents/carers evenings and reports at the end of each academic year.

## **Resources**

A range of Mathematical resources are available in school and are centrally located in the resource room. However some resources are accommodated in individual classrooms.

ICT plays an extensive part within the teaching and learning of Mathematics through various software including Purple mash and Education City. The use of ICT allows learners to be motivated and engaged by their mathematical studies, work independently and to apply their mathematical understanding purposefully.

## **Monitoring and Evaluating**

Monitoring and evaluation will be carried out in order to enhance the teaching and learning of Mathematics within our school. It is the responsibility of all staff, both teaching and non-teaching to monitor and evaluate the curriculum provision made for within the school, so that pupils make the greatest possible progress and enjoy the learning experience.

## **Review of the policy**

The policy will be reviewed annually by the Head, Governors and subject specialist.



Date policy approved by Governing Body Curriculum & Policy Committee: 21.02.18

Signed Chair of Curriculum & Policy Committee: \_\_\_\_\_

Mr M Maher

Signed Chair of Governing Body: \_\_\_\_\_

Mrs W Blundell

Policy Review Date: Spring Term 2019