Next review due: January 2025



### RADLETT LODGE SCHOOL LOCAL PROCEDURE FOR:

### **MATHEMATICS POLICY**

This policy is linked to and derived from the overarching curriculum policy.

Mathematics is a core subject in the National Curriculum. This policy outlines the purpose, nature and management of the mathematics taught at Radlett Lodge School and takes into account the special educational needs of the pupils whose diagnosis falls within the autistic spectrum.

The policy reflects the consensus of the whole teaching staff and implementation is the responsibility of all teaching staff.

# THE NATURE OF MATHEMATICS

Mathematics is an important tool in communicating information and ideas and for problem solving in everyday life. At Radlett Lodge, mathematical concepts are explored and investigated through practical activities that take account of impairments affecting the areas of communication, imagination and social understanding as well as sensory processing. Through our teaching of mathematics we provide opportunities to apply knowledge, skills and understanding across the whole curriculum. Pupils are encouraged to develop confidence and competence with numbers and measures to support the development of mathematical skills applicable and useful in later life.

#### **AIMS**

- To provide a range of mathematical activities for pupils as required by the National Curriculum.
- To provide basic "Learning to Learn" activities which are pre-requisites to early mathematical experiences and the development of skills in nu.
- To educate pupils and engage in activities at a level appropriate to their age and understanding.
- To encourage pupils to develop a positive attitude towards maths and communication.
- To offer pupils greater opportunities for independence.

- To develop pupils' ability to solve problems independently or co-operatively with others.
- To produce a range of learning environments to support the development and generalisation of mathematical skills across settings.
- To provide the opportunity to learn maths for use in everyday settings.

## **ENTITLEMENT**

The National Curriculum for Maths includes teaching in the following areas:

| Key Stage 1&2:                | Key Stage 3 & 4:                    |
|-------------------------------|-------------------------------------|
| Number (place value, + - x ÷, | Number                              |
| fractions)                    | Algebra                             |
| Measurements                  | Ratio, Proportion & rates of change |
| Geometry (shape)              | Geometry & Measures                 |
| Statistics (data)             | Probability                         |
|                               | Statistics                          |

All pupils at Radlett Lodge are offered a full balanced National Curriculum that is heavily differentiated to accommodate additional learning difficulties as well as the limited understanding in social communication and flexible thinking for pupils with autism.

Pupils work within their Key Stage age range and are sub-divided into groups according to their needs and functional ability. Work is differentiated according to the needs of the individual and is reflected in the pupils EHCP Outcomes.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Pupils are encouraged to make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving problems. They are also taught to apply their mathematical knowledge to science and other subjects.

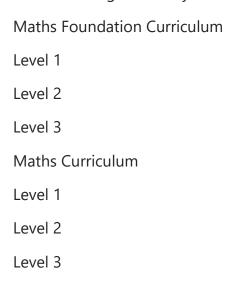
## <u>INTENT</u>

At Radlett Lodge School, our Mathematics curriculum is designed to be skill-based, adopting a mastery approach and utilising a spiral model to ensure aspirational learning outcomes are realised for all learners. Our intent is to create a supportive and inclusive environment that fosters a positive attitude towards mathematics, encourages curiosity, and allows students to develop essential skills to navigate real-

life situations confidently. We have carefully sequenced our Mathematics curriculum to enable students to practice new concepts and develop flexible thinking. This method ensures a gradual progression from simple to more complex ideas, developing a strong foundation while encouraging adaptable problem-solving skills. The curriculum is designed to build on prior knowledge and provide ample opportunities for students to engage in active learning experiences.

#### **IMPLEMENTATION**

At Radlett Lodge School, our maths curriculum is taught following a small steps scheme of work for each learning block. We have used the White Rose Maths scheme as a starting point and then carefully sequenced the units to provide key learning and skills followed by a block that enables hands-on learning experiences that all students can engage with to explore, practise and gain a thorough understanding of the key concepts and skills.



Level 4

Our curriculum provides access to many concrete representations of number such as, numicon, tens frames and counters, tens and ones, interlocking mathlink cubes, beadstrings and rekenreks. We use different resources to develop flexibility of thinking and to secure a deeper understanding of number. It is implemented in the following ways;

- Through carefully monitored long and short-term objectives.
- Through individual teaching to develop new skills.
- Through independent work where a pupil can practise a learnt skill.
- Through small group work.
- Through the teaching of Mathematics across the curriculum (particularly in science and computing).
- Through practical and functional activities.

- Through everyday real-life or engineered real-life practical situations which enable a pupil to generalise a concept.
- Through liaison with parents or carers where skills, knowledge and understanding can be transferred to daily life.

## **IMPACT**

Impact is measured by assessment against individual learning objectives and through Connecting steps (BSquared), including methodology and criteria for success are drawn up for each pupil by the class teacher, as well as through connecting step in conjunction with other professionals and support staff. All staff working with a pupil are responsible for recording and assessing these objectives at least weekly on an individual recording sheet. This is kept in each pupils purple file. It is the class teacher's responsibility to monitor and amend these objectives when they are achieved. The development and progress of these objectives will be reported on at the pupil's ECHP Annual Review.

Evidence of Mathematics is available on work sheets and in work books, when appropriate and through the use of videos and photographs. Examples of levelled evidence on a termly basis can be found in a pupil's Purple File under the 'Record of Achievement' section.

Pupils are first assessed at the end of a 12 week baseline period. From this point forward, teachers are required to complete assessment 3 times per year (at the end of each term). They will then discuss progress with the Deputy Principal at termly progress meetings.

## MULTI-DISCIPLINARY WORKING

Pupils at Radlett Lodge School are taught by Class Teachers (or Tutors in Post 16) and support workers who work under the direct guidance of the Class Teacher.

The Speech and Language Therapist assesses, designs and implements individual communication objectives in close liaison with the class teachers, parents and other professionals, and supports LSAs.

The Occupational Therapist may be included in assessment and the design of individual programmes for pupils whose oro-motor functioning is impaired. The OT may also be asked to contribute to advice regarding the posture of pupils when working at tables, specialist writing tools for those with fine motor difficulty, or specialist resources for those with visual perceptual difficulties.

Pupils are taught within the range of their key stage and are subdivided into groups according to their needs and abilities. Planning incorporates individual learning methods and differentiation is reflected in whole class / small group activities and in 1:1 work.

## **RESOURCES**

- Each class has a range of resources including a class computer and appropriate software
- Each pupil has access to concrete representations of number such as, numicon, tens frames and counters, tens and ones, interlocking mathlink cubes, beadstrings and rekenreks.
- Real-life materials and equipment are used as resources to enable the pupil to transfer skills and generalise concepts.
- A bank of practical and functional resources e.g. games, puzzles, clocks, measurement tools, coins/notes/cards.
- A fully functioning teaching kitchen.
- A soft play room and hall for positional language.

The Radlett Lodge School Local Procedure for Assessment, Recording and Reporting should be read in conjunction with:

## **NAS POLICIES**:

Special Educational Needs and Inclusion Policy Supported Home Learning Policy Remote Learning Policy

## RADLETT LODGE SCHOOL LOCAL PROCEDURES:

Curriculum
Teaching and Learning
Post 16 Education
Careers
EYFS Curriculum
Marking and Homework