

## MATHEMATICS

### INTENT

#### **What knowledge and skills pupils need to learn in order to keep their world's wide and to take advantage of opportunities, responsibilities in later life?**

MATHEMATICS is a key subject at Clifton Hill School is taught to all students in the school. The knowledge and skills we want our students to learn are sequenced through Bands 7 – Advanced skills, with the skills in each band building on the previous skills learnt.

The skills taught within bands 1-3 are broken down into 3 strands:

- Geometry
- Measurement
- Number

The skills taught within bands 4-7 for Cognition are broken down into 4 strands:

- Cause and effect
- Focus and engagement
- Fine and gross motor skills
- Problem solving

In Lower and Upper school Mathematics is taught as a discrete subject (**Bands 1-3**) and in Sensory school it is taught under the umbrella of Cognition (**Bands 4-7**)

These Strands have been chosen to reflect the learning needs and developmental stages of our students. We recognise that our students learning difficulties gives them increased challenges accessing a traditional secondary school curriculum so we follow a primary **Maths Mastery** curriculum in the formal Upper and Lower school Banding (<https://www.arkcurriculumplus.org.uk/>) In the formal curriculum MATHEMATICS is taught as a discreet subject and cross curricular in many other subject areas.

#### **How has the subject content been identified as most useful – why have we chosen the topics we have selected?**

We have chosen to teach MATHEMATICS from Years 7 through to Year 14. We have decided to continue to teach MATHEMATICS throughout Key Stage 5 because we want our students to know that maths is essential to everyday life and that students will continually develop themselves as confident mathematicians who are able to apply their knowledge post Clifton Hill. As a result students will embark in a lifelong positive relationship with number and Mathematics.

#### **How does the curriculum build and what do pupils need to be able to do to reach those end points**

The use of **Maths Mastery** (<https://www.arkcurriculumplus.org.uk/>) provides students with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience so that they are fully prepared for the future. The Curriculum of **Maths Mastery** ensures these keystones of Mathematics are embedded throughout all strands of the National Curriculum. By adopting a Mastery approach, it is also intended that all students, regardless of their starting point, will maximise their academic achievement and leave Clifton Hill School with an appreciation and enthusiasm for Maths to help support them in their daily lives and helping to ensure their worlds are kept wide and accessible.

Within Cognition for the non-formal curriculum the Banding System ensures that all students can learn Mathematics at the correct level for their starting point and the level of their ability.

### **How is the curriculum planned and sequenced so that new knowledge and skills built on and what has been taught before?**

Within the semi-formal curriculum topics are planned across a four year programme and are repeated with a different focus on content or skills as our students move between years. Careful assessment ensure that all teachers know what band and what skills their students are working on and what they will need to learn next. Within the formal curriculum planning is set across year group (Pre Reception, Reception, Year 1 and Year 2). Each year group follows a curriculum map for Autumn, Spring and Summer highlighting which unit will be studied – the curriculum allows for students to gain new knowledge and apply gained knowledge to their studies (what has been learnt before).

### **How the curriculum reflects our context by addressing gaps in pupils knowledge and skills – how have we made sure the balance of the subjects is correct**

By using a well-planned and resourced curriculum students gaps can be identified and addressed using appropriate interventions – for the formal curriculum this is addressed through resources and training available via the curriculum provider (<https://mymastery.arkcurriculumplus.org.uk/courses/c3b7683e-1f5f-4607-94f0-942b9ca8b457>)

Within the semi-formal Cognition curriculum gaps are addressed through teacher assessment within Classroom Monitor and targets are set accordingly. Planning and assessment uses the skills and knowledge of a multi-disciplinary team including **Occupational health** (who support with cause and effect, Fine and Problem solving and Gross motor skill development), **Speech and Language Therapy** (who support with Focus and Engagement and problem solving), **Physiotherapy** (who support with problem solving and fine and gross motor skills), **Drama Therapy** (who support with focus and engagement., The skills taught within Cognition allow students to make rich connections across mathematical ideas to develop fluency, mathematical encounters and competencies to aid their engagement.

By identifying and addressing gaps in student's knowledge we are creating independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.