

# Intent, Implementation and Impact: MATHS

## Intent:

The purpose of education at Howard House School is to equip the students with the knowledge and skills that will enable them to gain a better understanding of the world around them and prepare them for adulthood and working life; develop cultural capital and interests that will help remove barriers to achievement; and become rounded citizens that are able to positively contribute to our changing society. Our curriculum is founded on high expectations and increased opportunities for all students. It is our aim that students are accredited in all areas of study. All students will be supported to achieve accreditations in Maths, at the appropriate levels: Key stage 2 SATS; Functional Skills; GCSE.

At Howard House School we want to support our students overcome the barriers they face and develop a greater problem solving and initiative and understanding of numeracy and mathematics which relates to the world around them and their day to day lives. The curriculum will look to increase our student's life chances and provide them with the skills and knowledge that is needed to access better opportunities in further education, college, apprenticeships or/and work. The main objectives of the curriculum is to:

- Develop fluency, reasoning, and problem-solving skills throughout each area of the curriculum:
  - By developing fluency skills students will be able to apply mathematical skills in a range of different concepts and recall them quickly and accurately.
  - Reasoning, which is the process of applying logical thinking to a situation to create a strategy or method in order to find a solution.
  - Problem solving by become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- It is important to increase confidence and competence within our learners by providing an accessible curriculum for all levels, abilities and needs for them to enjoy maths and problem solving as a whole. This will help increase positive behaviour and attitudes towards learning.
- Many of the students that enrol into Howard House School have either missed periods of education, sometimes prolonged periods or/and have been working at a lower age level. For the students to access areas of the curriculum and prepare for GCSE exams we have to identify gaps in learning throughout key stages 1 to 4. If gaps are not addressed students will not be able to develop their skills.
- In life math is one of the most important skills to possess, such as budgeting, shopping, tax and applying for mortgages. Students will need to be able to apply the knowledge they gain through education in order to accurately meet these demands in life, in order to have a better quality of life.
- Many of our students move on to apprenticeships/college or work. In order for students to access the training and courses once they leave, it is imperative for them to have a good understanding of maths and numeracy. Basic numeracy skills that are learnt and developed throughout key stage 3 and 4 will be essential for the next steps for of each of the students.

In life and work, we have to make decisions based upon data and critical thinking. In order to make sure we make the best well informed decisions, this can be essential for health, voting and work. Students will learn how to analyse, compare and interpret.

Each lesson is carefully adapted to respond to individual starting points and individual challenges. Our staff are acutely aware that students may have experienced significant trauma and adverse childhood experiences (ACEs), this permeates our curriculum and is reflected in our adaptive teaching.

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## Implementation

The maths curriculum at Howard House is designed to challenge pupils as well as support them through their learning and educational journey to develop the necessary skills for life and to achieve qualifications. The curriculum is set out so staff, teachers, parents and students can identify what level students are at and where the next natural progression leads to, from year 5 to year 11. Every student will have 4 lessons of 30 minutes each week for maths.

The students who attend Howard House have many different needs that need to be met in order for them to learn and develop effectively, it is important for staff to ensure these needs are met each lesson and are well planned for by using students IEPs, aspirational grades, context grades, their own views and opinions on what helps them learn.

All this is done through:

- Adaptive teaching is used in each lesson, the needs of the students are looked at through their IEPs, diagnosis, environmental needs and what best helps to support them in their learning. Each student is offered the support mechanisms which are in their adaptive teaching document. As well as this, each student will have an adaptive teaching folder in their classroom that they will have access to each lesson, this includes number lines, times table squares, place value grids, overlays and any other resource that supports that particular student in each lesson.
- It is important for the students to feel safe and secure with in the classroom, this helps reduce anxiety and help students to process information. Students will have their own work place in each lesson with the necessary equipment and support tools to help them engage. Students will also have access to the use of bean bags, blankets (also weighted blanket), pillows and a relaxing learning environment.
- Every lesson is taught using the schools agreed teaching model which has been created to increase growth mindset and is consistent across each subject for each student. Students will be taught through the use of “I do”, “we do” and “you do”. This done through the use of the teacher demonstrating the task through modelling, followed by teacher led activity with students using different types of questions and student input. Finally, students will attempt questions which will enable the students to apply their learning in challenging contexts.
- The curriculum is also accessible for general subject teachers and not qualified members of staff to teach. The long-term plan is set up so staff are able to understand where and what level the students they are teaching are up to, they are also able to easily find the resources, adaptive teaching and differentiated work, as it follows a clear line of progression, to ensure all students are making progress.
- Each classroom has a teacher and 1 teaching assistant that is guided and trained by the teacher to ensure the staff have the knowledge and understanding to be able to support each child within their subject area. This includes CPD offered by the maths lead teacher. It is important for staff to ensure they are also up to date and continue to grow professionally through multiples forms of training, CPD and maths networking between heads of department within young foundations.

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- The curriculum presents opportunities for students to achieve GCSE grades 1 to 5 through AQA GCSE mathematics and also to achieve AQA entry level certificates from level 1 to level 3 during year 7 and 8. The curriculum is designed so students are able to close the gaps in their learning and when gaps are identified teachers and staff are able to address these by reducing the level to then build it back up to the stage of the curriculum the pupil is at.
- At the end of each term or component of work through entry level, students complete an assessment to identify progress and areas of strengths and weaknesses. This will also help to track progress towards their contextual and aspirational target grades. Furthermore, students will work towards their exams by gaining exam practice and exam technique to ensure they are best prepared and to reduce their own anxiety about exams.
- Many of the students who attend Howard House school have missed education, which means there is gaps within their learning. The curriculum allows for staff to identify these gaps and address them straight away, by working back through each level of the curriculum to provide students with the knowledge and skills to then build on a close these gaps.
- As stated in the intent it is important for staff to ensure students work towards achieving the objectives set out in the national curriculum and AQA specification. It is important for students to provide them with the best chances in life. This is done by providing students with the 'bigger picture' and 'why' they need to learn and know this and how it can help them in the future in working life by linking it to interests and job prospects.

Students are provided with a safe, secure and fun environment to enhance their chances of learning and enjoying the subject which they are learning to help them meet the objectives and successfully make progress with in each area of the subject, working towards accreditations to provide them the best opportunity in their next phase of life. All areas of the curriculum are set out with clear progression, created and adapted to support each child's individual needs to ensure the best chance of learning for them, whether it be a subject specialist, general teacher or other member of staff.