



Whole School Intent

At Ivy House, our overall Cognition and Maths curriculum intent is to foster the development of our students, ensuring they become capable, motivated and self-assured learners. Our approach encourages them to inquire, investigate, experiment, problem-solve and make sense of the world around them. Students are given irresistible learning opportunities to develop their schemas for attention, perception, pattern, recognition, learning, memory, concept formation, thinking, language and intelligence. Mathematics is a holistic concept taught through all areas, there is a focus on functional use in real world situations, Semi-Formal students are encouraged to apply Maths in context, maximising their independence is always our long-term aim.

We **inspire** by providing irresistible adaptive learning opportunities which centre on practical, real-life cognitive scenarios. These scenarios involve changes in pattern, quantities, space and time, allowing students to engage with concrete experiments that promote understanding.

We **nurture** by focusing on creating enriching environments where multi-sensory encounters, exploration, and play are encouraged. Through these activities, students can utilise early Cognition and mathematical concepts to explore and interact with their surroundings.

We **empower** by instilling confidence in each student and their abilities, using the fundamental principles of mathematics and technology, students are equipped with valuable knowledge that can be transferred to other areas of learning. This empowerment enables them to become self-assured individuals who are ready to embrace new challenges.

EYFS	Key Stage 1 / 2		Key Stage 3		Key Stage 4 / 5	
	Pre-formal	Semi-formal	Pre-formal	Semi-formal	Pre-formal	Semi-formal
We ensure children are given the core foundations develop their own schemas and mental models through a holistic manner. Typically, children are learning through play inside and outside the classroom. Children will experience the awe and wonder	We provide our pupils with innovative and engaging ways of proactively exploring, investigating, and understanding the world around them. The curriculum is process based and not product driven. We ensure we are developing pupils understanding, the use and control of their senses which allows them to fully explore the world and come to an	Through carefully planned schemes of work (White Rose Maths), we provide pupils with opportunities in the three core Mathematical areas (Number, Geometry & Measurement). Pupils are encouraged to develop their knowledge of early Maths and to begin to apply this in some different contexts.	Students are provided age appropriate, irresistible learning opportunities to develop their: Awareness, Sequence & Pattern, Exploration, Control and Problem solving. We ensure we are embedding students understanding, the	Through carefully planned schemes of work (White Rose Maths), we provide students with opportunities in the three core Mathematical areas (Number, Geometry & Measurement). Students are encouraged to develop their knowledge of early Maths and to begin	Students are encouraged to transfer, generalise, and maintain their knowledge. Students are encouraged to take risks and continually develop their mental models. Students are provided with engaging age-appropriate learning opportunities that	Students are provided with meaningful, age appropriate, functional and transferable Cognition & Maths knowledge, that will empower them to be as independent as possible. Students are encouraged to develop their knowledge of Maths and to begin to embed this in more



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<p>of the world in which they live. Children will have access an inclusive environment to ensure the most appropriate exploration method of Mathematics, Number and Shape, Space and Measure. This is bespoke to each individual's strengths and areas of need.</p>	<p>understanding of it, how to interact with it, and how to interact with each other.</p> <p>The Cognition Curriculum is divided into 4 areas: Awareness – Sequence & Pattern – Exploration – Control and Early Problem solving.</p>	<p>Through a play based, sensory approach pupils will develop their schemas in Number, Geometry, and Measurement. This will enable them to continually develop their independence.</p> <p>Pupils have continuous access to the outdoors and continually have opportunities to use their knowledge in some different contexts. Pupils are encouraged to take risks with their learning to develop their problem-solving skills and independence.</p> <p>Pupils will continue to have a significant amount of time reinforcing Number to build competency and ensure they can confidently access the curriculum.</p>	<p>use and control of their senses which allows them to fully explore the world and come to an understanding of it, how to interact with it, and how to interact with each other.</p>	<p>to apply this in more complex different contexts whilst being stretched and challenged.</p> <p>Through a exploration based, sensory approach pupils will develop their schemas in Number, Geometry, and Measurement. This will enable them to continually develop their independence.</p> <p>Consolidation of individual Cognition and Maths knowledge through a range of experiences both in school and the wider community. They continue to use their own methods of investigating to engage with the knowledge of life skills.</p>	<p>inspire and empower them.</p> <p>There is a specific focus to provide each student with meaningful Cognition knowledge that will empower them and their families to have increased confidence to make decisions about their futures. This is embedded through the Branches Curriculum.</p>	<p>complex contexts whilst being stretched and challenged.</p> <p>The Branches Curriculum ensures each individual and their families have increased confidence to make realistic decisions about their future and their independence is maximised and they are ready to face new challenges.</p> <p>Students will be given opportunities to revisit previously learnt knowledge and develop their fluency, reasoning and problem solving as they become more confident mathematicians for life after Ivy House School.</p>
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Implementation						
EYFS	Key Stage 1 / 2		Key Stage 3		Key Stage 4 / 5	
	Pre-formal	Semi-formal	Pre-formal	Semi-formal	Pre-formal	Semi-formal
<p>The EYFS Mathematics Framework focuses on the three areas of learning which include Mathematics, Number and Shape, Space and Measure.</p> <p>This curriculum is implemented through a sensory-based approach where learning interweaves into a holistic curriculum offer. All activities are child-centred, exciting and sequentially planned, but also allow for incidental learning opportunities to occur. All of this learning takes place</p>	<p>Pupils have the opportunity to engage in irresistible Cognition lessons which are planned around a variety of engaging topics.</p> <p>Pupils are encouraged to proactively explore, investigate to develop their understanding the world around them. The curriculum is process based and not product driven and pupils are given engaging resources to encourage them to make express preferences, track items, respond and begin to anticipate repetitive learning experiences.</p>	<p>Pupils have the opportunity to engage in dedicated Cognition and Maths lessons. Our curriculum aims to develop and strengthen knowledge from EYFS in the core areas, Number, Geometry and Measurement.</p> <p>Pupils will follow the Write Rose Maths scheme of work. This provides structure and sequence to their learning and enables teachers to revisit learning, address misconceptions and encourage pupils to develop their mental</p>	<p>Students are provided with the opportunity to participate in captivating Cognition lessons that revolve around a range of interesting topics. These lessons are designed to encourage active exploration and investigation, fostering a deeper understanding of the world around them. Our curriculum focuses on the learning process rather than the final outcome, empowering pupils to engage with interactive resources that enable them to express preferences,</p>	<p>Students have the opportunity to engage in dedicated Cognition and Maths lessons. Our curriculum aims to develop and strengthen knowledge from Key Stage 1 & 2 from the core areas, Number, Geometry and Measurement. These all support to enhance their understanding and knowledge to become life long Mathematicians.</p> <p>Students will follow the Write Rose Maths scheme of work. This provides structure and sequence to their learning and enables teachers to</p>	<p>Students are encouraged to transfer, generalise, and maintain their knowledge through engaging, age-appropriate learning opportunities. Lessons focus on various aspects such as communication, community, friendships, creativity, contributions, choice, health, wellbeing, and skills for life, using the Branches Curriculum.</p> <p>Additionally, students are exposed to a variety of cultural capital 'anchors' which incorporate relevant</p>	<p>Students receive enhanced lessons that aim to enhance their understanding and expand their knowledge based on their previous learning experiences. These lessons focus on various aspects such as communication, community, friendships, creativity, contributions, choice, health, wellbeing, and skills for life, particularly in developing their Mathematical knowledge following the Branches' Curriculum. Additionally, students are exposed to a variety</p>



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<p>through experience and participation with a high emphasis on repetition. Repetition of learning is essential to support progress and attainment within the areas of Cognition and learning.</p> <p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly.</p>	<p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly.</p> <p>Participation in themed days/weeks, such as NSPCC Number Day etc (see Events Calendar)</p>	<p>models, building robust schemas.</p> <p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly.</p> <p>Participation in themed days/Weeks such as NSPCC Number Day etc (see Events Calendar)</p>	<p>track items, respond actively, and even anticipate repetitive learning experiences. By offering these engaging resources, we aim to stimulate pupils' curiosity and facilitate their cognitive development.</p> <p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly. Participation in themed days/weeks such as NSPCC Number Day etc (see Events Calendar)</p>	<p>revisit learning, address misconceptions and encourage students to develop their mental models, building robust schemas.</p> <p>Students have access to the wider community, which includes engaging in practical experiences such as: Weekly shopping trips to buy ingredients for making their own lunch, promoting independence and practical application of mathematical concepts.</p> <p>Visits to local cafés, fostering awareness of money usage and social routines.</p> <p>Access to a local allotment, where students can participate in the "From Plot to Plate" initiative.</p>	<p>local and national events to provide a context for learning.</p> <p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly.</p> <p>Participation in themed days/weeks, such as NSPCC Number Day etc (see Events Calendar)</p>	<p>of cultural capital 'anchors' which incorporate relevant local and national events to provide a context for learning.</p> <p>The curriculum focuses on functional Maths knowledge, vocational training, and real-life applications to support students' and prepare them for adulthood.</p> <p>Students lead a weekly in school Café and are able to develop their fluency, reasoning and problem solving as they become more confident mathematicians</p> <p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly.</p> <p>Participation in themed days/weeks, such as NSPCC</p>
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				<p>Through these experiences, students at Ivy House gain practical skills, develop a connection with the community, and apply their mathematical knowledge in real-life situations.</p> <p>Personal Learning Goals (PLGs) are informed by pupils' EHCP and are reviewed termly.</p> <p>Participation in themed days/Weeks such as NSPCC Number Day etc (see Events Calendar)</p>		<p>Number Day etc (see Events Calendar)</p>
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Impact



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EYFS	Key Stage 1 / 2		Key Stage 3		Key Stage 4 / 5	
	Pre-formal	Semi-formal	Pre-formal	Semi-formal	Pre-formal	Semi-formal
<p>In EYFS pupils will begin to develop the schema needed to progress throughout Ivy House School and begin to develop their own curiosity journey of the world around them.</p> <p>The impact of this curriculum is that children (by the time they transition into the next Key Stage) will have achieved their full potential and be fully prepared for the next curriculum. They will have the knowledge and confidence for future learning.</p>	<p>Pupils will extend their cognitive knowledge in exploring the world and begin to make sense of experiences and sensations that involve change.</p> <p>Pupils will begin to form good attachment with key people and staff can recognise pupil's small steps of progress through movements/vocalisations, facial expressions etc.</p> <p>We encourage pupils to develop their preferred communication methods to show their likes and dislikes.</p> <p>Pupils will begin to accept/anticipate daily routines and begin to understand that they can affect</p>	<p>Pupils will have developed their Cognition and Maths knowledge, building on the knowledge they acquired during the EYFS and begin to use this in different contexts.</p> <p>Pupils will have a developing mathematical knowledge the core areas, Number, Geometry and Measurement.</p> <p>Pupils will have developed their mental models, building robust schemas to allow them to become more confident Mathematicians.</p> <p>Pupils will be thoroughly prepared for their transition to the next key stage. Through their engagement with</p>	<p>Students have the opportunity to expand and consolidate their cognitive knowledge by exploring the world around them and making sense of their experiences and sensations, particularly those related to change. Through these explorations, pupils start to develop positive attachments with key people, and our staff members are trained to recognise and acknowledge the small steps of progress made by pupils, such as through movements, vocalizations, and facial expressions.</p> <p>Pupils begin to develop the concept of daily routines, accepting</p>	<p>Students' Cognition and mathematics schemas will be enriched and embedded. Students will be able to make independent choices based on their knowledge and understanding of the world around them.</p> <p>Students will have a deepening mathematical understanding and knowledge the core areas, Number, Geometry, and Measurement.</p> <p>Students will have developed their mental models, building robust schemas to allow them to become more confident Mathematicians.</p> <p>Students will have a greater</p>	<p>Students will have had multiple learning opportunities to develop key cognitive knowledge that are personalised to them to develop their own mental models.</p> <p>Students will have gained the confidence to express themselves effectively. They are more empowered to articulate their opinions promoting self-expression and effective communication. This confidence enables them to actively engage with familiar people. Students are securing the concept of daily routines, accepting, and anticipating them as part of their daily lives. They have</p>	<p>Students will leave school ready for their next steps in life.</p> <p>Students will have a Mathematical schema which is enriched and embedded, through personalised programmes. It reflects the fact that they are moving towards an independent role in adult life, taking greater responsibility for themselves.</p> <p>Students will be able to use their robust mental models to be fluent problem solvers and confident at reasoning.</p>



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	things in their environment.	the curriculum, pupils have developed a increased awareness of the world around them and acquired the ability to recognise and navigate changes more effectively. This comprehensive preparation will equip them with the necessary skills and knowledge to confidently embark on their journey to key stage 3.	and anticipating them as part of their daily lives. They also begin to understand that their actions can have an impact on their environment, empowering them to recognise their ability to affect things around them. These experiences help foster cognitive growth and a sense of autonomy. We promote clear communication of likes and dislikes among our students, we encourage pupils to express their preferences and effectively communicate what they like or dislike. Pupils develop the ability to accept and anticipate daily routines. Through regular exposure and familiarity, they become accustomed to the structure and	understanding of routines and will be independent as possible. Students will demonstrate their confidence when out in the community, beginning to use their knowledge and understanding so they can begin to generalise their local environment.	developed knowledge that their actions have an impact on their environment, empowering them to recognise their ability to affect things around them. These experiences help foster cognitive growth and a sense of autonomy.	
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			<p>predictability of daily routines. This promotes a sense of comfort and understanding, allowing them to navigate their day-to-day activities with ease and confidence.</p>			
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