Mathematics

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Subject Intent:

At Pool Hayes Academy our curriculum:

- Will inspire our pupils to appreciate the beauty of Mathematics.
- Will provide pupils with the confidence and resilience to think critically and creatively.
- Will develop mathematical abilities and skills that enable students to succeed both academically and in everyday life.
- Has a pivotal role in developing pupils' communication skills across the curriculum and ensuring success in our academies.
- Ensures pupils can understand, interpret and present mathematical information in a variety of forms.
- Actively encourages pupils to vocalise their thoughts and ideas on the concepts explored and develops their cultural capital by exposing them to 'real-life' problems and applications.
- Reflects our high expectations for every child to gain the powerful knowledge, by providing the support and challenge they specifically need.
- Will cover the breadth and depth of the 2014 National Curriculum for Mathematics

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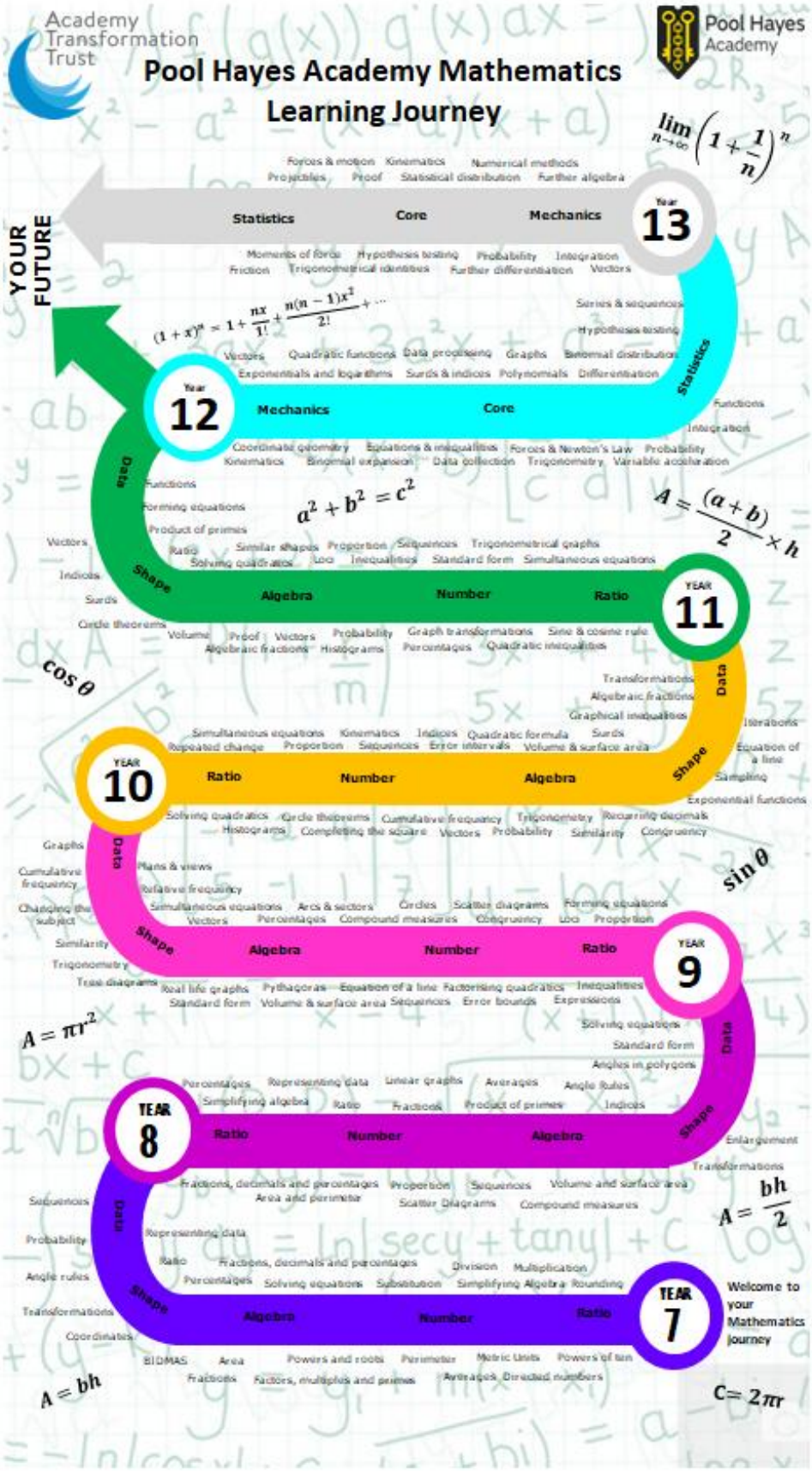
Learning Journey:



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Links to curriculum map:

(LINK)

Assessment outline:

Formative assessment is a type of assessment used throughout the learning process to monitor student progress and provide feedback, aiming to improve both teaching and learning. It's not about assigning grades, but about helping students understand their strengths and weaknesses and how they can improve.

Summative assessments are evaluations conducted at the end of a learning period, such as a unit, course, or program, to assess a student's overall understanding and achievement. They are designed to gauge what a student has learned and whether they have met specific learning objectives.

Formative:

- Cold-calling in lessons
- Mini-whiteboard tasks
- Peer assessment
- Self-assessment
- Quizzes

Summative:

- End of module assessments
- Half year and end of year exams

Trips that are used to support the curriculum:

Extra-curricular activities:

- Sparx club

Mathematics

Pool Hayes Academy

Our pupil pledge:

At Pool Hayes Academy, our Mathematics curriculum is a source of genuine pride. It is ambitious, inclusive, and intellectually rich, built on the belief that every student deserves to find their voice, expand their worldview, and leave school as a confident critical thinker equipping them with essential life skills.

1. Developing essential skills:
Mathematics is fundamental to everyday life and underpins various fields like science, technology, and finance. Our strong Mathematics curriculum equips students with the skills needed to navigate these areas and succeed in future academic and professional pursuits.

2. Fostering critical thinking:
Mathematics education emphasises logical reasoning, problem-solving, and analytical thinking. Students learn to break down complex problems, identify patterns, and develop strategies for finding solutions, skills that are transferable to various life situations.

3. Promoting a deeper understanding:
Our well-designed curriculum aims for a deep and secure understanding of Mathematical concepts, rather than rote memorisation. This approach encourages students to not just know how to solve problems, but why the methods work.

4. Cultivating a love for Mathematics:
We strive to create a positive and engaging learning environment where students enjoy the challenges and explore the beauty of Mathematics. This can lead to a lifelong appreciation for the subject and a willingness to embrace future mathematical learning.

5. Connecting to real-world applications:
Our curriculum also emphasises the practical applications of Mathematics in real-life situations. This helps students see the relevance of what they're learning and how it can be used to solve everyday problems.

6. Preparation for the Future
Finally, we are proud that our curriculum prepares students for life beyond the classroom. Whether they go on to further study, employment, or other

pathways, our students leave with the confidence to express themselves clearly, think critically, and engage thoughtfully with the world around them. Above all, we aim to instil a lifelong love of Mathematics and learning.

Careers:

Many jobs directly utilize mathematical skills, while others benefit from strong analytical and problem-solving abilities. Careers include:

- Actuary
- Statistician
- Data Scientist
- Operational Researcher
- Cryptographer
- Financial Analyst/Trader
- Meteorologist
- Teacher
- Software Developer
- Economist
- Accountant
- Engineer
- Management Consultant
- Risk Manager
- Market Research Analyst
- Research Scientist
- Game Developer