



## Numeracy Strategy 2022-23

**Numeracy has a vital role in enabling and sustaining cultural, social, economic, and technological advances.  
Improved numeracy skills lead to more aspirational jobs, greater well-being and a happier and fuller life.**

Students' numeracy skills (the ability to effectively talk, listen, read, and communicate numerically) are key to educational progress, social integration and personal development.

Numeracy skills are fundamental life skills: interpreting data, charts, and diagrams; solving problems based on logical thinking and reasoning; understanding and explaining solutions.

Numeracy will be developed and consolidated through opportunities to apply and develop skills across the curriculum.

All staff have the privilege of supporting students' progress in numeracy and in equipping them with the necessary language, knowledge, understanding and skills.

### Our aims in developing Numeracy across the Academy

Our goals	Our methods	Our results
<p><b>1.Contextual Data</b> To raise awareness of and understanding of students' data especially CAT and latest assessment scores.</p> <p>Three of the four CAT scores (Quantitative Reasoning, Non-verbal Reasoning and Spatial Ability) indicate how numerate a student is.</p>	<ul style="list-style-type: none"> <li>• All staff will receive training on how to interpret data in terms of their students' numeracy skills.</li> <li>• All staff will include numeracy data in their red folders and on their seating plans.</li> <li>• All teachers will be aware of which students receive additional numeracy support.</li> <li>• Assessment data will be regularly analysed to identify students who require additional support in lessons.</li> <li>• All teachers will be aware of students with specific learning difficulties, especially related to numeracy e.g. Dyscalculia.</li> <li>• Numeracy support strategies will be developed, shared with all departments and their effectiveness monitored.</li> <li>• All teachers will be able to identify students requiring additional numeracy support within their curriculum area.</li> </ul>	<ul style="list-style-type: none"> <li>• Teachers are aware of their students' barriers to learning (including numeracy difficulties alongside SEND) and are astutely planning to ensure appropriate support and challenge so that all their students will know more and remember more.</li> </ul>
<p><b>2. Coherence</b> All departments work collaboratively to promote Numeracy, where appropriate, through consistent approaches to the solving of numerical problems.</p>	<ul style="list-style-type: none"> <li>• All staff will be familiar with the correct mathematical language, notation, conversions, techniques and calculator-use relating to their own subject(s) and where it links with others (making explicit use of learning journeys).</li> <li>• All staff will use the Map To Mastery resources for numeracy-related topics (e.g. Calculate like a..., Interpret like a..., Measure like a...).</li> <li>• Staff will receive regular training on disciplinary numeracy and/or calculator topics.</li> <li>• All departments will reflect on their students' progress towards mastery by using data analysis to improve numeracy-related knowledge and skills.</li> <li>• A Common Calculation policy (and training) will be promoted within the school to ensure the appropriate methods for each stage of learning are correctly identified.</li> </ul>	<ul style="list-style-type: none"> <li>• Student mastery of and attainment in in numeracy-content will improve across the academy.</li> <li>• All departments can identify what elements of numeracy are delivered in their department to support students to mastery.</li> <li>• All departments know the numeracy barriers to student mastery and have put support in place to address them.</li> </ul>

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<p><b>3. Calculator</b> To ensure consistency in the teaching of calculator skills, the Casio FX991 calculator will be used across all subjects.</p>	<p>All departments will:</p> <ul style="list-style-type: none"> <li>○ indicate in their schemes of work when and where students are likely to require calculators.</li> <li>○ be clear when it would not be appropriate for students to use a calculator for their calculations.</li> <li>○ analyse the effective use of a calculator as part of CSEF DDIs.</li> </ul> <p>A common checklist for essential calculator skills will be shared and training sessions will be provided for all staff and students as required.</p>	<p>Student attainment in calculator-based content will improve across the academy.</p>
<p><b>4. Cultural Capital</b> To develop students' cultural capital through a range of extra-curricular numeracy-based learning experiences.</p>	<p>All students will receive opportunities to develop their numeracy skills during the morning mentor programme. This will include the following themes: Famous Mathematicians (in year 7); Numeracy problem solving skills (in year 8 and year 9), life skills including calculator skills and cross-curricular numeracy skills (in year 10).</p> <p>Students will be given regular extra-curricular numeracy opportunities including external competitions, money week, practical investigations, and maths support clubs/clinics.</p>	<ul style="list-style-type: none"> <li>● Students have a raised awareness of numeracy within the broader curriculum.</li> <li>● Students have increased exposure to numerical cultural capital.</li> </ul>