

Numeracy Catch Up Strategy

To support and improve the attainment of year 7 students entering secondary school below the expected standard such that those students catch up with their peers.

Key focus areas:

- Early identification of pupils requiring support
- Implement strategies within mathematics lessons to improve progress of students whose KS2 attainment is defined as below age-related expectation.
- Increase rigour in the curriculum model
- Deliver a same day intervention programme to increase the progress of identified cohort of catch up students.
- Increase consistency of ETA support within lessons.
- Implement formal assessment to evaluate effectiveness of strategies.
- Provide departmental support with homework tasks.

Numeracy Catch Up Strategy 2020-2021

Year 7- unknown

Students are completing baseline assessments in order to identify students below age-related expectation.

Year 8 - £10,036.50

48 students in Year 7 are defined as below age-related expectation in maths (KS2 data). 19 of these students achieved < 95 as a scaled score.

Year 9 - £9,775.50

53 students in Year 9 were identified as below the expected age-related expectation in maths (KS2 data).

There were 28 students who worked within intervention groups from Dec 2018 until June 2019. These students were split into smaller groups and using the Numicon Big Ideas programme developed their skills in areas identified within the initial baseline. Students scores increased by an average of 58% from the initial baseline to their final baseline and all students scored > 80% on mini-assessments after each theme.

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact (Sept 2021)</u>
<ul style="list-style-type: none">• Early identification of pupils requiring support	<ul style="list-style-type: none">• Use baseline assessments to identify students below age-related expectation• Catch Up pupils identified on seating plans and in SIMS marksheets (CKE).	

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact (Sept 2021)</u>
<p>Implement strategies within mathematics lessons to improve progress of students whose KS2 attainment is defined as below age-related expectation (quality first teaching).</p>	<ul style="list-style-type: none"> • Embed use of manipulatives in lessons. Concrete resources to support pictorial and abstract representations in order to develop conceptual understanding (all staff). • Develop further intelligent practice in lessons to ensure support and challenge for all attainers (all staff). • Key topics identified using assessment data and agreed programme of interleaving to ensure students understanding is improved upon (CKE) • Recall and retention strategies to be developed (CKE) 	
<p>Increase rigour in the curriculum model</p>	<ul style="list-style-type: none"> • Use information from primary schools and KS2 assessment to increase rigour in the curriculum content (VSM) • Develop resilience and reasoning skills through curriculum content (VSM/all staff) 	

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact (Sept 2021)</u>
<p>Deliver same day intervention programme to increase the progress of identified cohort of catch up students.</p>	<ul style="list-style-type: none"> • Identify students from KS2 and baseline assessment data (all staff) • Implement same day intervention programme during afternoon form registration. The programme aligns with key concepts in the curriculum and develops the building blocks required to access the curriculum content (CKE) • Anne Howarth to lead same day intervention programme to run alongside curriculum and to support with consistency in lessons for our lowest attainers (CKE) • Create new numeracy intervention group by identifying and intervening with students whose numeracy skills are a barrier to their learning in Year 7 through form time support sessions (CKE) 	
<p>Increase consistency of ETA support within lessons.</p>	<ul style="list-style-type: none"> • Deliver termly CPD with teaching assistants to focus on working with the manipulatives that are likely to be used in the upcoming lessons (CKE, ETAs). Sessions booked in for the first week of each term to highlight key upcoming misconceptions. • Deliver CPD with teaching assistants on the changes to the curriculum and exam specifications (CKE, ETAs). 	

Focus Area	Action – VSM/CKE to oversee	Impact (Sept 2021)
Implement formal assessment to evaluate effectiveness of strategies and inform future catch up planning	<ul style="list-style-type: none"> • Implement and evaluate baseline assessments standardised across year 7 and year 8 (VSM/CKE). • All intervention programmes baselined and evaluated (CKE). • Develop assessment programmes to evaluate the impact of same-day intervention sessions initially and across the year (CKE) • Progress of catch up pupils evaluated at each assessment point (VMS/CKE) • Strategies evaluated termly (all staff) 	
Provide departmental support with homework tasks.	<ul style="list-style-type: none"> • Invite key students to attend homework support sessions where manipulatives are used to continue the work completed in class. 	

Numeracy Catch Up Strategy 2019-2020

Year 7 - £10,036.50

48 students in Year 7 are defined as below age-related expectation in maths (KS2 data). 19 of these students achieved < 95 as a scaled score.

Year 8 - £9,775.50.

53 students in Year 8 are defined as below the expected age-related expectation in maths (KS2 data).

There were 28 students who worked within intervention groups from Dec 2018 until June 2019. These students were split into smaller groups and using the Numicon Big Ideas programme developed their skills in areas identified within the initial baseline. Students scores increased by an average of 58% from the initial baseline to their final baseline and all students scored > 80% on mini-assessments after each theme.

A same-day intervention plan will be implemented for 2019/20. AH will consistently work with the current lowest attaining groups in year 7 and 8. If any students are identified as having not grasped the key concepts from that weeks lessons students will receive intervention for 2 x 25 minute sessions during afternoon registration. If all students have shown a good understanding then students will be selected to stretch their skills for this topic.

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact (Sept 2020)</u>
Implement strategies within mathematics lessons to improve progress of students whose KS2 attainment is defined as below age-related expectation (quality first teaching).	<ul style="list-style-type: none"> • Develop use of manipulatives in lessons. Concrete resources to support pictorial and abstract representations in order to develop conceptual understanding (all staff). • Deliver termly CPD with teaching assistants to focus on working with the manipulatives that are likely to be used in the upcoming lessons (CKE, ETAs). • Deliver CPD with teaching assistants on the changes to the curriculum and exam specifications (CKE, ETAs). • Develop intelligent practice in lessons to ensure support and challenge for all attainers (all staff). 	<ul style="list-style-type: none"> • CPD sessions covered the use of manipulatives for Year 7 & Year 8 SoW. Emphasis was placed on transitioning from the concrete to the pictorial and then the abstract. • CPD plan with ETA's was interrupted due to circumstances of this academic year. This will be addressed again next academic year. • CPD sessions focussing on structure of tasks to both support and challenge all learners.

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact (Sept 2020)</u>
	<ul style="list-style-type: none"> • Use question level analysis (QLA) to track progress of skills and plan lessons to close the gaps (all staff). • Deliberate practice of skills identified as areas for development in QLA (all staff) • Catch Up pupils identified on seating plans and in SIMS marksheets (CKE) 	<ul style="list-style-type: none"> • Summative assessments were used to highlight areas that students required further work within. These topics were then interleaved back into the SoW at agreed points in the upcoming weeks. • Catch-up students identified on seating plans.
Increase rigour in the curriculum model	<ul style="list-style-type: none"> • Develop closer links with primary feeder schools (all staff) • Use information from primary schools to increase rigour in the curriculum content (VSM) • Develop resilience and reasoning skills through curriculum content (VSM/all staff) 	<ul style="list-style-type: none"> • CPD session focussing on the structure and content of SATS papers and which areas of maths at KS2 students in Year 7 struggled most with compared to the national average. This information was then embedded into the SoW to ensure that these areas were addressed.

Focus Area	Action – VSM/CKE to oversee	Impact (Sept 2020)
Implement a same day intervention programme to increase the progress of identified cohort of catch up students.	<ul style="list-style-type: none"> • Identify students from KS2 and baseline assessment data (all staff) • Implement same day intervention (SDI) programme during afternoon form registration. The programme aligns with key concepts in the curriculum and develops the building blocks required to access the curriculum content. • Anne Howarth seconded to lead same day intervention programme to run alongside curriculum and to support with consistency in lessons for our lowest attainers. 	<ul style="list-style-type: none"> • SDI plan was implemented from October through until March. Although no formal assessment data was able to be collected due to lockdown, the anecdotal evidence suggests students understanding of key concepts had improved without hindering future learning by removing them from lessons. • Anne Howarth led the SDI program excellently, working closely with staff to ensure that the students selected were those who would benefit most. Cost: £8400
Implement formal assessment to evaluate effectiveness of strategies and inform future catch up planning	<ul style="list-style-type: none"> • Implement and evaluate baseline assessments standardised across year 7 and year 8 (VSM/CKE). • All intervention programmes baselined and evaluated (CKE). • Develop assessment programmes to evaluate the impact of same-day intervention sessions initially and across the year. • Progress of catch up pupils evaluated at each assessment point (VMS/CKE) • Strategies evaluated termly (all staff) 	<ul style="list-style-type: none"> • Standardised scores were calculated after each assessment to measure students progress compared to those of similar starting positions. • Intervention sessions were baselined and due to be evaluated in May. • Assessment programmes for the SDI has begun development with regular assessment points identified for Sept 2020.
Provide departmental support with homework tasks.	<ul style="list-style-type: none"> • Invite key students to attend homework support sessions where manipulatives are used to continue the work completed in class. 	<ul style="list-style-type: none"> • Students invited at regular intervals when issues with homework were identified.

Numeracy Catch Up Strategy 2018-2019

Year 7 Context - £9,775.50

53 students in Year 7 were defined as below the expected age-related expectation in maths (KS2 data).

33 of these 53 students have a KS2 scaled score 95 or above. All year 7 students completed a baseline assessment to evaluate their conceptual understanding of place value. 8 of these 33 students attained less than 10 marks (27%) in the baseline assessment suggesting this lack of understanding may not allow them to fully access the curriculum content.

The remaining 20 students all have a scaled score below 95 and scored below 14 marks (40%). 16 of these students scored less than 10 marks (27%) on this baseline assessment.

Therefore, there are currently 24 students whose recent attainment suggests they may not be fully accessing the maths curriculum and therefore timely intervention is needed to close the gap.

Year 8 Context

Upon entry in year 7, 52 students in year 8 were defined as below the expected age-related attainment. Of these 52 students, 17 students were forecast GCSE Grade 1 or Grade 2 in the end of year 7 GL assessments and 14 of these students scored 10 marks or less in their year 8 baseline assessment.

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact</u>
Implement strategies within mathematics lessons to improve progress of students whose KS2 attainment is defined as below age-related expectation (quality first teaching).	<ul style="list-style-type: none"> • Develop use of manipulatives in lessons. Concrete resources to support pictorial and abstract representations in order to develop conceptual understanding (all staff). • Deliver CPD with teaching assistants to work with manipulatives in lessons (CKE, ETAs). • Deliver CPD with teaching assistants on the changes to the curriculum and exam specifications (CKE, ETAs). • Develop intelligent practice in lessons to ensure support and challenge for all attainers (all staff). 	<ul style="list-style-type: none"> • All classrooms are now equipped with manipulatives that can be used within lessons. CPD sessions have been undertaken by the department in using manipulatives to support understanding. Cost: £3486.96 • CKE has worked with ETA's to develop their understanding of changes in the curriculum and using manipulatives. This will continue in 2019/20. • CPD sessions to develop deliberate intelligent practice within all teachers lessons have been undertaken and the impact of these have been evident in the most recent book scrutinies.

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact</u>
	<ul style="list-style-type: none"> • Use question level analysis (QLA) to track progress of skills and plan lessons to close the gaps (all staff). • Deliberate practice of skills identified as areas for development in QLA (all staff) • HegartyMaths used to support individual needs (all staff) • Catch Up pupils identified on seating plans and in SIMS marksheets (CKE) 	<ul style="list-style-type: none"> • QLA documents for whole cohort shared with staff after each assessment and regular feedback lessons take place based on these. • Review lessons evident across all classes to tackle these identified areas. • Homework is regularly set on HegartyMaths and students encouraged to undertake further study on areas of weakness after each assessment. • All students who scored <100 in KS2 are identified clearly on marksheets and highlighted on seating plans.
<p>Implement a catch-up programme to increase the progress of identified cohort of catch up students</p>	<ul style="list-style-type: none"> • Identify students from KS2 and baseline assessment data (all staff) • Deliver training to staff and volunteers delivering the ‘Numicon Big Ideas’ catch up programme (CKE). • Implement ‘Numicon Big ideas’ year 7 catch up programme during form registration. This is a ten-week programme that will be baselined in week 1 and re-assessed and evaluated in week 16. Participating students will gain 2 hours intervention per fortnight. The programme aligns with key concepts in the curriculum and develops the building blocks required to access the curriculum content. • Anne Howarth seconded to lead withdrawal programme to run alongside curriculum and to support with consistency in lessons for our lowest attainers. 	<ul style="list-style-type: none"> • An initial group of 28 students were selected to undertake the Numicon Big Ideas catch-up programme. CKE delivered training to AH, HW and LS in how to deliver these sessions. Cost: £1413.76 • 28 students undertook this programme. On average students scores increased by over 58% from their initial baseline to their final baseline. Students attitude to maths survey showed a significant increase in their positivity towards learning maths. • Anne Howarth has worked with the vast majority of the Numicon groups taking small groups out of class to work on the basic concepts. Cost: £3300

<u>Focus Area</u>	<u>Action – VSM/CKE to oversee</u>	<u>Impact</u>
Implement formal assessment to evaluate effectiveness of strategies and inform future catch up planning	<ul style="list-style-type: none"> • Implement and evaluate baseline assessments standardised across year 7 and year 8 (VSM/CKE). • All intervention programmes baselined and evaluated (CKE). • Progress of catch up pupils evaluated at each assessment point (VMS/CKE) • Strategies evaluated termly (all staff) 	<ul style="list-style-type: none"> • Year 7 assessments were designed specifically to test skills embedded from the scheme of learning. • All students who received intervention sat the Numicon baseline assessment to highlight exact areas of weakness. After a topic had been covered in intervention sessions students then completed an internal mini-assessment to ensure they had understood these key concepts. Students also completed an attitude to maths survey at the start and end of the programme. • VSM and CKE met regularly to assess students progress and adapt intervention groups as required.
Develop an all-through curriculum model that allows for the early identification of pupils requiring support through links with primary schools.	<ul style="list-style-type: none"> • Develop closer links with primary feeder schools (all staff) • Use information from primary schools to increase rigour in the curriculum content (VSM) • Develop resilience and reasoning skills through curriculum content (VSM/all staff) 	<ul style="list-style-type: none"> • Staff visited primary schools to deliver taster sessions in June/July. • Strengths and weaknesses of feeder primary schools in comparison to the national average were analysed during twilight sessions and common teaching approaches discussed. • Curriculum has been developed continually throughout the year and examples of best practice shared during CPD sessions.

Numeracy Catch Up Strategy 2017-2018

The Catch Up funding for the academic year of 2017-2018 was spent on training a group of teaching assistants to deliver the 'Catch Up Numeracy' programme, and on buying the resources to support these sessions. These sessions took place in the maths department during morning registrations. 52 students were identified as being below age related expectations (KS2/GL Baseline Assessment Data). 40 students attained expected or above expected progress including 9 students who attained much higher than expected progress (data taken from the standardised GL assessments).