

Year: 2023-2024

Subject leader: Naomi Thomas

Governor Link: TBC



Vine Tree Primary School

Mathematics Impact Plan

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| **Outcomes from previous years** | | | | | | |
| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Baseline | 74% GLD Maths | 48.1% ARE Maths  33.3% GD | 46.7% ARE Maths  16.7% GD | 58.6% ARE Maths  17.2% GD | 66.7% ARE Maths  4.8% GD | 76.7% ARE Maths  0% GD |

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| **Targets for July 2024** | | |
| End of EYFS: | End of KS1: | End of KS2: |
| In line with national  2023 GLD Maths 67% | In line with national  2023 70% ARE Maths 16% GD | In line with national  2023 73% ARE Maths 13% GD |

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| **Links to School Strategic Development Plan (Quality of Education)** |
| We will continually strive to achieve the school’s 5 Key Values through the formal curriculum and through all the other experiences offered to our children. High quality education will *raise the children’s standards of attainment*, enabling them to:   * develop their use of English and Maths which provide the foundation for all their other learning   Embed consistent whole school approaches to the teaching of writing and maths:   * Classroom environments will be developed and used consistently and effectively to promote literacy and maths skills across the curriculum (e.g. Working Walls with progression of knowledge, phonics displays, vocabulary displays, handwriting displays.) * Maths Leader to participate in the Sustaining Mastery group led by the Cheshire and Wirral Maths Hub to lead the development and improvement of teaching of Maths * English Lead (Reading Leader) and Maths Lead to continue to provide frequent coaching, CPD and monitoring of the teaching of whole class reading and language to improve pupil’s vocabulary.   In EYFS:  To continue to embed our Phonics / Writing and Maths strategies in combination with CPD partners to ensure:   * Improved outcomes in early writing, Reading and Maths |

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| **Rationale for the Impact Plan** |
| To build pupils confidence and resilience and ensure that they are fluent and have conceptual understanding of key mathematical concepts.  To ensure children can reason and problem solve in a range of mathematical contexts.  Ensure that children have a positive experience of mathematics and understand the value and the purpose of maths for every-day life. |

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| **Potential barriers to the Impact Plan** |
| New members of staff to the school in Reception and Year 6  Member of staff with increased teaching time in Year 1  New member of staff to year 3  Change in assessment of maths – use of DC Pro  Competition for intervention time with Reading  Higher than usual numbers of persistent absence (22.3%) – above national (9.9%). Above target of 13%. Some classes significantly affected.  Higher than local authority average number of pupils with EAL (16.8% compared to LA average of 7.7%)  Higher than average number of pupils on our provision map for SEN Support is above average at 14.7%.  56% of families experience social and economic disadvantage |

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| Intent | **Key Improvement Priorities for Mathematics** | | |
| **Priority 1:**  To ensure coverage of the maths curriculum and raise attainment in measurement at the end of KS2 and ensuring Intent and Planning documents are followed and embedded across the school. | **Priority 2:**  To fully embed and sustain staff knowledge of the teaching for mastery principles and the CPA approach. | **Priority 3:**  To ensure that gaps in children’s fluency skills are targeted and developed consistently throughout the school. |
| **Intended outcome for children**  Children are provided with a learning sequence that is progressive and has a starting point appropriate to their needs. They are supported and challenged appropriately.  Children able to retain their learning due to being given appropriate time to develop independence and confidence with key areas prior to moving on.  Children develop their fluency, reasoning and problem-solving skills.  Children are provided with regular opportunities to access the geometry, measure and statistics areas of the curriculum to ensure coverage and progression.  **Intended outcome for teaching/leadership**  Teachers are clear on what the measurement objectives are and what the track back for each of these is.  Teachers are clear on the progression to mastery and greater depth in all areas. Teachers are able to challenge and support children effectively.  Leaders are able to monitor whether the Intended curriculum is being delivered – intent document.  **Intended outcome for whole school**  Clear and consistent progression across the school in all areas. | **Intended outcome for children**  Children’s fluency will continue to improve.  Children will be able to apply previous knowledge to new skills.  Children will have a better understanding of Mathematical concepts.  Development of mental strategies.  Development of vocabulary.  Children will use models and images to help them to reason.  Children will have more independence within their independent work.  Children will have increased stamina for problem solving.  **Intended outcome for teaching/leadership**  Teachers will be more confident in helping children to apply previous understanding to key learning.  Teachers will be able to develop effective vocabulary through the use of concrete resources. Teachers will have a stronger understanding of reasoning and problem solving.  **Intended outcome for whole school**  Standards will be raised across the school – a greater percentage of children will be secure in the expected standard.  Increase in the use of mathematical vocabulary and reasoning.  Greater independence.  More resilience.  A higher percentage of children will reach greater depth. | **Intended outcome for children**  Gaps in children’s understanding will be recognised and addressed, with a focus on addition/ subtraction facts and times tables.  Children will have the essential critical knowledge required for their year group and retention of these skills will improve. This will then impact positively on reasoning and problem-solving skills.  **Intended outcome for teaching/leadership**  Teachers will be aware of the basics needed for the core content that needs to be delivered to ensure that children are fluent across the year.  Teachers will use AFL to form the focus for their fluency sessions.  Fluency will be targeted and focused to the needs of the pupils in the cohort.  **Intended outcome for whole school**  Attainment and retention of key fluency facts will be increased across the school. |
| **Evidence base** |  |  |
| **Priority 1:**  Intent documents  Teachers planning  Maths books  Learning walk  Staff Voice  End of term assessment | **Priority 2:**  Teacher planning (maths lessons and fluency sessions)  Arithmetic scores  Staff voice  Pupil voice  Maths books  Learning walk | **Priority 3:**  Post learning tasks  Formative assessment tracker (DC Pro)  Maths books  Fluency planning  Precision teaching  Staff voice  Pupil voice |

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|  | **Key Strategic Actions  (RAG rated during year)** | **Who/When?** | **Cost** | **Summary of Monitoring (Aut/Spr/Sum)** |
| **Priority 1:**   * Subject leader to share planning documents and provide access to the First 4 Math Academy. * Staff to use documentation for planning sequences of learning * Introduction of ‘Non-number Friday’ to ensure that time is created for coverage of geometry, measure and statistics curriculum * All staff to assess learning at the end of each unit using post-task assessments and formative tracking on DC Pro * Subject leader to monitor implementation of planning through book look, learning walk and pupil voice | NT – September INSET  All staff – ongoing  NT- Launch at September INSET  All staff to implement  All staff to implement  NT monitor through book look/ DC Pro  NT/SLT | £999 + VAT  HLTA class cover | **Autumn**  September INSET – introduced First4Maths academy and shared good practice with all staff.  Calendar invites shared with staff for all CPD zoom sessions via First4Maths. Staff meeting time given to catch up on Zoom training if required (10th October).  September INSET - Non-number Friday introduced and checked on via book look (6th November).  Formative assessment is being carried out in all classes and has been entered onto DC Pro.  Book look carried out on 6th November to ensure INTENT documentation was being used to plan and deliver maths lessons.  Pupil voice carried out during SIP visit on 13th November.  **Spring**  All formative assessment completed and uploaded to DC Pro for the end of the Spring term.  Learning walk carried out with SIP 23rd January  Staff continue to use First 4 Maths Academy for planning.  **Summer**  Formative assessment completed on DC Pro, supported by summative assessment judgements for end of year.  First 4 Maths continues to be used in most classes.  Attended event for changes in First 4 Maths for the next academic year. |
| **Priority 2:**   * Access to First 4 Maths academy training/ planning videos and half termly zoom sessions * Engagement in Sustaining Mastery * Staff meetings – planning, sharing good practice, cascade training from Maths Hub Sustaining Mastery, reasoning and problem solving focus * Subject leader to monitor through book looks and Learning walks during fluency sessions and maths lessons * Carry out staff voice questionnaire * Carry out pupil voice * Carry out parent workshops to ensure that parents can support children with their maths at home. | NT – September INSET  NT – termly  NT – termly  NT / SLT termly monitoring  NT – Autumn  NT – Spring  NT - Spring | £999 + VAT  Class cover to release NT  HLTA class cover | **Autumn**  Attended the first Sustaining Mastery TRG on 8th December.  Staff meeting on 10th October to share Intent document and collect staff feedback. Staff voice completed.  Staff meeting scheduled for 16th January with a reasoning and problem solving focus.  Staff meeting scheduled for 27th February to cascade training from Maths TRG on Oracy project.  Book look on 6th November and SIP visit on 13th November gave an insight into teaching for mastery and the use of CPA approach.  Attended training via NCETM for Mastering Number at home project (21st November)  **Spring**  Attended Maths TRG 2 23rd January  Attended Maths TRG 3 13th March  Oracy project shared with staff and case studies began.  Further Oracy training staff meeting scheduled 11th June  Reasoning and problem solving training completed with all teachers.  Learning walk completed with SIP 23rd January where CPA approach was evidenced in all lessons observed.  Parent workshops carried out with Reception (7/28 attended), Year 1 (10/29 attended) and Year 2 (13/30 attended) parents.  **Summer**  Attended Maths TRG 4 2nd May  Attended Maths TRG 5 20th June  Oracy staff meeting/ CPD training carried out 11th June. All staff invited to observe oracy strategies being used in year 3. |
| **Priority 3:**   * Re-launch of Mastering Number in Rec, Year 1 and Year 2 * Planned fluency sessions in KS2 in addition to the maths lesson (Daily 10) * Ongoing AfL using DC Pro formative assessment tracker to identify gaps * Ready to progress document to refer to in order to support gaps * Times Tables system launched and used to continually reinforce facts and identify gaps/ intervention required * Numbots used across the school to support development of + and – fact knowledge * Subject leader to monitor implementation of mastering number/ daily fluency | NT launch – GM, LT, SS and TW to teach  NT, AH, EW, DW and SS to teach  All teachers  NT to share/ First 4 Maths Academy  Staff meeting  All teachers to implement  NT to launch. Teachers to share passwords etc.  NT | £275  HLTA class cover | **Autumn**  Importance of Mastering Number reiterated with KS1/ Rec staff.  All staff encouraged to plan and deliver fluency sessions for 10 minutes outside of the maths lessons.  Formative assessment carried out and DC Pro updated.  Numbots and TTRS launched and certificates given out weekly in celebration assembly.  Attended training via NCETM for Mastering Number at home project (21st November). Project to be launched in the new year.  **Spring**  Mastering number continues to be delivered – emphasised by the Mastering Number at Home project.  Daily fluency discussed with teachers at progress meetings  AfL used and tracked using DC Pro – discussed with teachers at progress meetings  Numbots/ Times Table Rockstars certificates awarded in weekly assemblies  **Summer**  Mastering Number used in Reception, Year 1 and Year 2.  DC Pro updated at the end of year with formative assessment judgements, and supported with summative assessment.  Numbots/ Times Table Rockstars certificates given out in assembly each week. |

Implementation

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|  | **Evaluation of impact (Autumn/Spring/Summer)** | **Next steps** |
| **Priority 1:**   * **Autumn** – Intent and planning documentations being used to plan and deliver maths lessons. Curriculum coverage is being addressed through the use of non-number Friday. Formative assessment is being carried out to identify gaps in learning and priority groups to ensure that progress is maintained and that attainment is improved. * **Spring** - Intent and First 4 Maths academy documentation continues to be used across school. Most classes are still implementing non-number Friday. Due to concerns regarding coverage, some classes have decided to pause non-number Friday to ensure number objectives are covered. All classes continue to formatively assess maths using DC Pro. * More ‘non-number’ objectives covered across this school this year than last year, but still not all. Curriculum coverage is still a concern with gaps being identified in all year groups except reception. Summative data in the whole supported summative judgements that were being made.   In KS2 the percentage of measure questions answered correctly increased from 35.5% in 2023 to 57.4% in 2024.  In KS1 the percentage of measure questions answered correctly increased from 43.4% in 2023 to 59% in 2024. | **Autumn -** Complete pupil progress meetings to identify intervention opportunities for pupils. Continue to monitor coverage of the curriculum to ensure that gaps are bridged before the end of the year. Remind staff of Ready to Progress criteria and that this should highlight the key areas to spend longer on when teaching/ delivering the maths curriculum.  **Spring –** Ensure that end of term summative data is collected for each class. Decide on the most appropriate assessment to use. Ensure that DC Pro is up to date for the end of the academic year regarding AfL to inform next years planning. Explore further opportunities for intervention including the Ready for Year… interventions from First 4 Maths.  **Summer –** to evaluate the use of formative/ summative assessment. Have staff found ongoing formative assessment useful or would they prefer to use the new style of summative assessment each term? Or both? Consider how to ensure adequate coverage of the curriculum next year. Signpost staff to where there are gaps and use Ready to Progress documentation to support planning. |
| **Priority 2:**   * **Autumn** – staff are using the CPA approach and most of the teaching for Mastery principles. Reasoning and Problem solving identified as an area for development through staff voice and book looks. * **Spring** – CPA approach remains embedded as identified through learning walk with SIP. Staff have a bank of Reasoning and Problem Solving resources available that have been shared through staff training. * **Summer** – CPA approach remains embedded. Most staff continue to use First 4 Maths Academy to support planning, but some have reverted to White Rose. | **Autumn –** Staff CPD on reasoning and problem solving. Learning walk 23rd January with SIP.  **Spring –** Repeat book look to ensure reasoning and problem solving opportunities are being identified and planned for.  **Summer –** roll out of new First 4 Maths resource packs and ensure consistency across the school through regular book looks. Carry out staff voice to ensure staff confidence in CPA approach. Carry out further pupil voice to ensure children are confident. |
| **Priority 3:**   * **Autumn** – Mastering Number and Maths fluency sessions are being delivered. Time is being spent in maths lessons on ensuring pupils are fluent before moving on (strive for 5). * **Spring** – Mastering number sessions are being planned and delivered. KS1 staff have reported that they can see the difference it is making. Strive for 5 shared with staff and evidenced in books as seen during learning walk with SIP. Fluency sessions are being planned carefully as discussed with staff during pupil progress meetings. Mastering Number at home project launched in Reception/ KS1. * **Summer** – In End of KS1 data, the percentage of children answering number and place value questions correctly increased from 64.75 in 2023 to 88% in 2024 suggesting that Mastering Number has had a positive impact upon children’s number sense. Further work needs to be carried out next year on times tables although our score has improved in the MTC this year (20.04 compared to National Average of 20.2 in 2023 – 2024 released in Nov). However, only 25% of children scored 25/25. | **Autumn –** Encourage staff to be more explicit with Strive for 5. Launch Mastering Number at home project. Monitor delivery of daily fluency/ mastering number in school time.  **Spring –** repeat book look to ensure Strive for 5 is embedded. Plan a parent workshop for KS2 parents.  **Summer –** Adapt times table strategy to improve performance in times table check, and children’s recall of times table facts. Carry out parent workshops in the Autumn term. Ensure that mastering number continues next academic year. Ensure consistency in fluency sessions in KS2 through learning walks. |
| Reported to SLT/Governors (date): | |

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