

Maths

WAT Aspire Curriculum - our curriculum develops students' aspirations so that they strive to be the best that they can be. In all subjects we carefully plan the subject knowledge, skills and vocabulary, coupled with specific Aspire learner skills and character virtues, so that our students have the tools to be successful in learning and in life. This document sets out the key principles in this subject area.



Teaching and Learning Cycle



Long Term Overview

- At Tenterfields we follow the Ark Mathematics Mastery curriculum. The Mathematics Mastery curriculum is cumulative - each school year begins with a focus on the concepts and skills that have the most connections, these concepts are then applied and connected throughout the year to consolidate learning.
- The Yearly planner sets out the coverage of units from Reception to Year 6
 - [Yearly Planner 2022-23](#)
- The Curriculum Map demonstrates the progression of skills from Reception to Year 6

- [R-Y6 Curriculum Maps](#)
- In order to ensure that pupils' knowledge of calculations is cumulative, we follow the Ark Mathematics Mastery Progression in Calculations. This approach allows pupils to gain a deeper understanding of calculation by using manipulatives and pictorial representations before moving to formal written methods later on in their journey.
- [Progression in Calculations](#)

Medium Term Planning

EYFS

[Early Mathematical Experiences](#)

[R U2 Unit overview](#)

[R U3 Unit Overview](#)

[R U4 Unit Overview](#)

[R U5 Unit Overview](#)

[R U6 Unit Overview](#)

[R U7 Unit Overview](#)

[SR U8 Unit Overview](#)

[R U9 Unit Overview](#)

[R U10 Unit Overview](#)

[R U11 Unit Overview](#)

[R U12 Unit Overview](#)

[R U13 Unit Overview](#)

[R U14 Unit Overview](#)

[R U16 Unit Overview](#)

[R U17 Unit Overview](#)

[R U18 Unit Overview](#)

[R U19 Unit Overview](#)

Year 1

[Year 1 Curriculum Map](#)

[Y1 U1 Unit Narrative](#)

[Y1 U2 Unit Narrative](#)

[Y1 U3 Unit Narrative](#)

[Y1 U4 Unit Narrative](#)

[Y1 U5 Unit Narrative](#)

[Y1 U6 Unit Narrative](#)

[Y1 U7 Unit Narrative](#)

[Y1 U8 Unit Narrative](#)

[Y1 U9 Unit Narrative](#)

[Y1 U10 Unit Narrative](#)

[Y1 U11 Unit Narrative](#)

[Y1 U12 Unit Narrative](#)

[Y1 U13 Unit Narrative](#)

[Y1 U14 Unit Narrative](#)

[Y1 U15 Unit Narrative](#)

[Y1 U16 Unit Narrative](#)

Year 2

[Year 2 Curriculum Map](#)

[Y2 U1 Unit Narrative](#)

[Y2 U2 Unit Narrative](#)

[Y2 U3 Unit Narrative](#)

[Y2 U4 Unit Narrative](#)

[Y2 U5 Unit Narrative](#)

[Y2 U6 Unit Narrative](#)

[Y2 U7 Unit Narrative](#)

[Y2 U8 Unit Narrative](#)

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[Y2 U13 Unit Narrative](#)

[Y2 U14 Unit Narrative](#)

[Y2 U15 Unit Narrative](#)

[Y2 U16 Unit Narrative](#)

Year 3

[Year 3 Curriculum Map](#)

[Y3 U1 Unit Narrative](#)

[Y3 U3 Unit Narrative](#)

[Y3 U4 Unit Narrative](#)

[Y3 U5 Unit Narrative](#)

[Y3 U6 Unit Narrative](#)

[Y3 U7 Unit Narrative](#)

[Y3 U8 Unit Narrative](#)

[Y3 U9 Unit Narrative](#)

[Y3 U10 Unit Narrative](#)

[Y3 U11 Unit Narrative](#)

[Y3 U12 Unit Narrative](#)

[Y3 U13 Unit Narrative](#)

Year 4

[Year 4 Curriculum Map](#)

[Y4 U1 Unit Narrative](#)

[Y4 U2 Unit Narrative](#)

[Y4 U3 Unit Narrative](#)

[Y4 U4 Unit Narrative](#)

[Y4 U6 Unit Narrative](#)

[Y4 U7 Unit Narrative](#)

[Y4 U8 Unit Narrative](#)

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[Y4 U11 Unit Narrative](#)

[Y4 U12 Unit Narrative](#)

[Y4 U13 Unit Narrative](#)

[Y4 U14 Unit Narrative](#)

Year 5

[Year 5 Curriculum Map](#)

[Y5 U1 Unit Narrative](#)

[Y5 U2 Unit Narrative](#)

[Y5 U3 Unit Narrative](#)

[Y5 U4 Unit Narrative](#)

[Y5 U5 Unit Narrative](#)

[Y5 U6 Unit Narrative](#)

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[Y5 U11 Unit Narrative](#)

[Y5 U12 Unit Narrative](#)

[Y5 U13 Unit Narrative](#)

[Y5 U14 Unit Narrative](#)

Year 6

[Year 6 Curriculum Overview](#)

[Y6 U1 Unit Narrative](#)

[Y6 U2 Unit Narrative](#)

[Y6 U3 Unit Narrative](#)

[Y6 U4 Unit Narrative](#)

[Y6 U5 Unit Narrative](#)

[Y6 U6 Unit Narrative](#)

[Y6 U7 Unit Narrative](#)

[Y6 U8 Unit Narrative](#)

[Y6 U9 Unit Narrative](#)

[Y6 U10 Unit Narrative](#)

Maths Meetings

Maths Meetings are fifteen minute lessons that have more than one focus. In KS1 and KS2, Maths meetings are held at least twice weekly with the purpose to consolidate key areas of mathematics and developing fluency in recall of key knowledge.

In EYFS, Maths meetings happen daily and cover key areas, such as: the calendar, daily routines and recognising the number of children in the class each day (which involves counting, addition, subtraction, one more and one less etc.) Any other key concepts being taught at that time are also linked in.

The content of the Maths Meetings are derived from the Assessment for Learning that happens daily in a Maths lesson, post assessment quizzes and the Question Level Analysis from the NTS tests and SATs papers that are done termly.

Assessment

The purpose of our assessment is to give appropriately timed feedback that focuses on moving learning forward. We use both formative and summative assessment to assess pupils' understanding, knowledge and skills.

Formative assessment

These assessments take place in lessons as part of our teaching cycle. It can take many forms, such as Key Learning Tasks, multiple choice quizzes, short-answer quizzes or the use of whiteboards. They are often used in Smart Starts which frequently take the form of low-stakes retrieval quizzes. Marks from these are not collected or analysed centrally; they inform what the teacher does next. The teacher will then deliver appropriately timed feedback that focuses on moving learning forward

eg:

- Retrieval practice through Smart Starts and pre and post assessment quizzes.
- Evaluating 'What a Good One Looks Like'.
- Modelling, explaining and whole-class learning checks.
- Use of our High Challenge for All framework to support scaffolding and high expectations for all.
- Same day interventions.

Summative Assessment

Pre block and post block assessments are carried out at the end of each unit of work eg Year 1.

NTS tests are used termly for years 1-5 to support teach assessment judgement and in Year 6 mock SATs are delivered at 3 points within the year before the Statutory tests in May. All children are given a judgement of WB (well below) WTS (working towards expected standard) EXS (working at expected standard) or GDS (working at the greater depth standard). This is awarded termly as part of our assessment cycle.

Vocabulary

[Vocabulary List Reception to Year 6](#)

[Reasoning sentence stems](#)

Tier 3 Mathematical vocabulary is taught explicitly and identified in Maths Mastery as 'Star Words'. These are introduced to the children at the beginning of each lesson and are then built upon throughout the unit of work. Throughout each lesson, children are expected to use these words to support their reasoning and justification both verbally through a talk task and in a written form when applying to independent work.

High Challenge for All

Challenging and interesting work is an entitlement for all our learners irrespective of their ability. High challenge is a focus for us at Tenterfields and this is our 'High Challenge for All' rationale which sits alongside our Teaching and Learning cycle [High Challenge for All Our Model](#)

Pupils consolidate learning throughout the year and have the opportunity to 'master maths'; by building their foundational knowledge and are able to develop mathematical fluency and conceptual understanding. Within the lessons, the children always begin by recalling prior knowledge and understanding with a 'Do Now'.

SEND

When a pupil has been identified with special needs, their learning will be further scaffolded or differentiated by the class teacher to remove barriers to learning and enable them to access the curriculum. Teacher's use a range of teaching strategies to involve every child in learning based upon what they already know and can do. This may include the use of specific resources and strategies

- the use of visual prompts and manipulatives (which should be readily available)
- sensory audits
- task management boards to chunk tasks
- reading rulers, concentration cushions, fidget toys, sand timers

All staff have high expectations of all pupils. By reviewing children's progress through formative, and summative assessments then gaps in their understanding, skills and knowledge can quickly be identified and support can be put into place to enable them to make progress. At Tenterfields the interests of the child are always considered when planning the curriculum to ensure that children are engaged and enthusiastic about their learning.

Reading Learner Tools

- Working walls share examples of the current learning
- Tier 3 vocabulary is clearly displayed. In EYFS, this tends to be found on the activity tables for children to use in their conversations for reasoning
- Manipulatives are displayed and readily available for children to use
- Years 4, 5 and 6 use their iPads to consolidate and accelerate their learning with regular practice on our trust-wide subscribed APPs such as TTRS and Numbot.
- Mathsbot is used to support with manipulatives
- Maths Meeting walls display current learning
- Squared paper is used for modelling and working walls