

Mathematics at Abingdon Primary School



Our Bespoke Drivers



Role Models of all
protected
characteristics

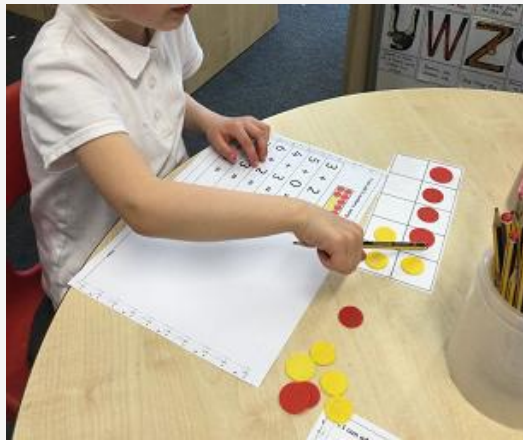
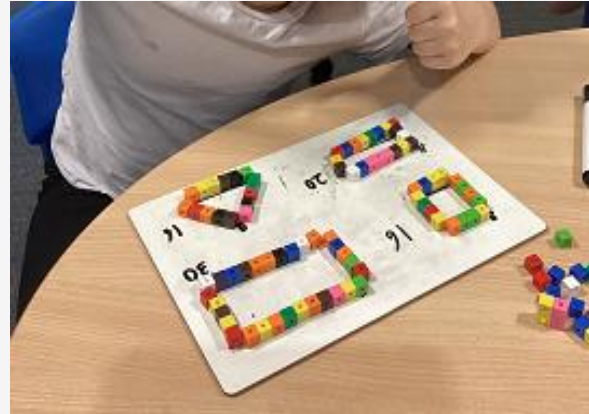
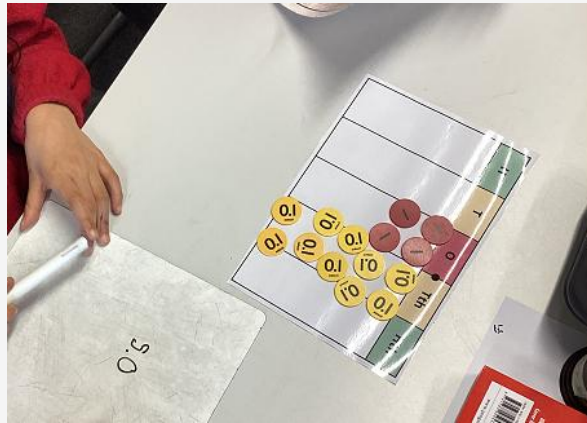


Accessing our local
area and all it offers



The Power of Word

Mathematics at Abingdon



Mathematics at Abingdon

Date: 7.2.25

LO: make number bonds to 20

Numicon Counters Multilink Base 10 Number line Place value chart Bead strings Other

Make, draw and write number bonds to 20.

20

16 4

20

18 2

20

17 3

20

11 9

20

15 5

16 + 4 = 20

18 + 2 = 20

17 + 3 = 20

15 + 5 = 20

14 + 6 = 20

12 + 8 = 20

13 + 7 = 20

19 + 1 = 20

Date: 8.4.25

LO: full and empty

Numicon Counters Multilink Base 10 Number line Place value chart Bead strings Other

The cup is full.

The cup is empty.

The cup is almost full.

The cup is almost empty.

full nearly full nearly empty empty

LO: To subtract a 1-digit number from a 2-digit number crossing 10.

1634 - 6 = 1628

1857 - 8 = 1849

2954 - 6 = 2948

3952 - 4 = 3948

5645 - 7 = 5638

4525 - 8 = 4517

3612 - 2 = 3610

4831 - 6 = 4825

7923 - 7 = 7916

1264 - 9 = 1255

1000 1000 1000 1000 1000

1000 1000 1000 1000 1000

1000 1000 1000 1000 1000

1000 1000 1000 1000 1000

1) 1759 - 5 = 1754

2) 3626 - 2 = 3624

3) 22756 - 5 = 22751

4) 4562 - 1 = 4561

5) 2528 - 7 = 2521

6) 98689 - 7 = 98682

To practise fluency of number using doubling and bonds to 20

Which computer number will reach the podium first?

120 240 1440 20880

First to the Podium Bonds to 20 edition

Which computer number will reach the podium first?

120 240 1440 20880

First to the Podium Bonds to 20 edition

How is Learning Across Our School is Sequenced?

YEAR 5 MATHEMATICS LONG-TERM PLAN

Teaching for Mastery curriculum

ACADEMIC YEAR
2026 / 2027

Curriculum basis: NCETM Curriculum Prioritisation, the National Curriculum for England and the DfE Ready-to-Progress criteria. Suggested timings are indicative and should be adapted responsively.

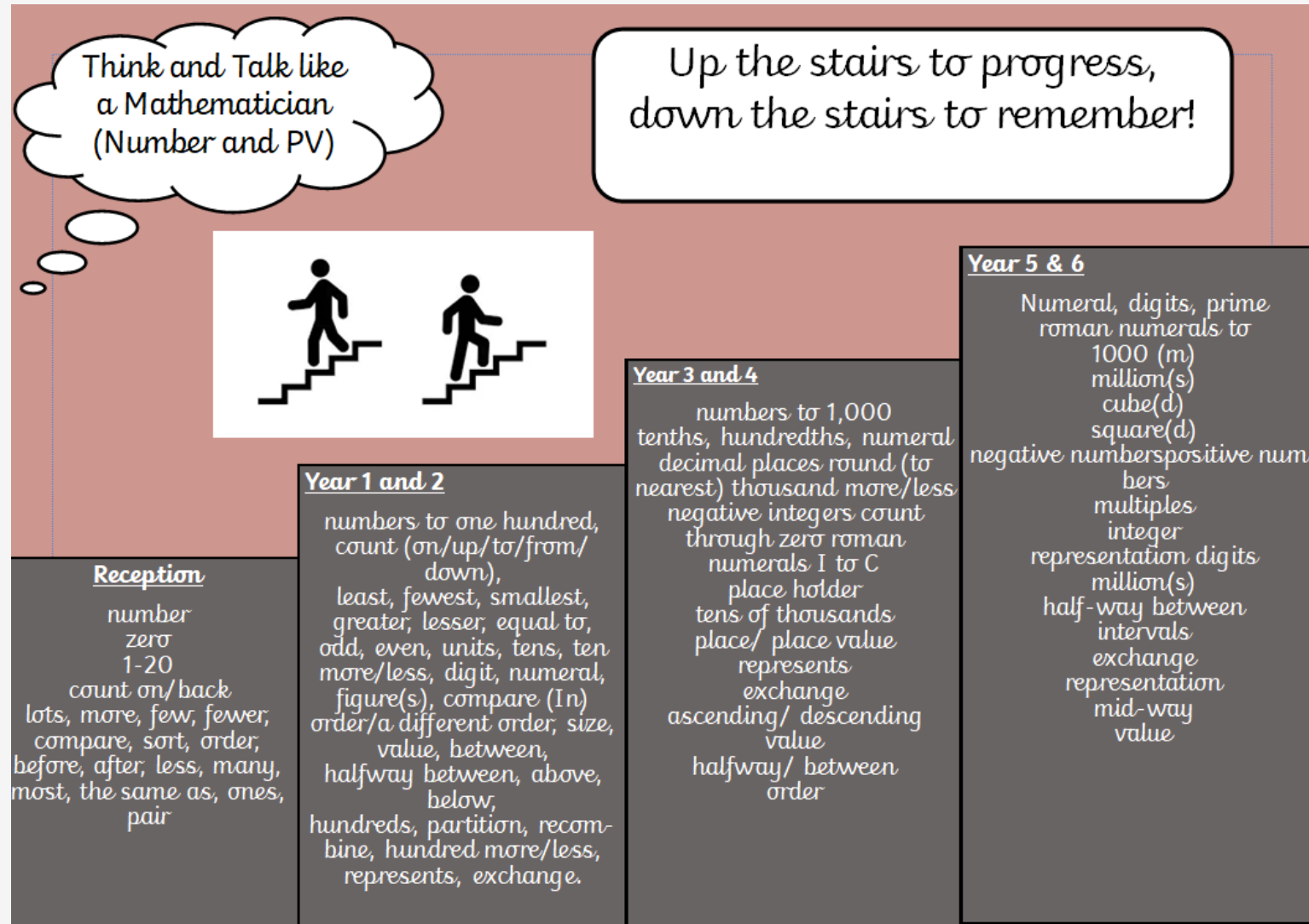
Reviewed: _____
Maths Lead: _____

ONGOING FLUENCY AND ARITHMETIC PROVISION Year 5 pupils receive regular, responsive retrieval and arithmetic practice alongside the main mathematics lesson. Practice secures multiplication facts, number relationships and efficient calculation while remaining connected to conceptual understanding.

Half term	Unit	NCETM unit	Indicative time	Curriculum strand	Ready-to-Progress	PD / guidance	Online unit
Autumn 1	1	Decimal fractions	5 weeks	Number and place value / decimals	5NPV-1–4, 5NF-2	1.23, 1.24	Open
Autumn 1	2	Money	2 weeks	Measurement / calculation	National Curriculum	1.25	Open
Autumn 2	3	Negative numbers	2 weeks	Number and place value	National Curriculum	1.27	Open
Autumn 2 / Spring 1	4	Short multiplication and short division	6 weeks	Multiplication and division	5MD-3, 5MD-4	2.14, 2.15	Open
Spring 1	5	Area and scaling	5 weeks	Measurement / multiplicative reasoning	5G-2	2.18, 2.17	Open
Spring 2	6	Calculating with decimal fractions	3 weeks	Decimals / multiplication and division	5MD-1	2.19, 2.29	Open
Spring 2	7	Factors, multiples and primes	4 weeks	Multiplication and division / number facts	5MD-2	2.20, 2.21	Open
Summer 1	8	Fractions	7 weeks	Fractions / decimals / percentages	5NPV-5, 5F-1–3	3.6, 3.7, 3.10	Open
Summer 2	9	Converting units	2 weeks	Measurement	5NPV-5	DfE Year 5 guidance	Open
Summer 2	10	Angles	3 weeks	Geometry	5G-1	DfE Year 5 guidance	Open

Here is an example of a long term plan that will be followed for an academic year. It follows the NCETM approach and sequenced effectively.

Vocabulary Progression



Mathematical vocabulary is key to the learning of mathematical concepts.

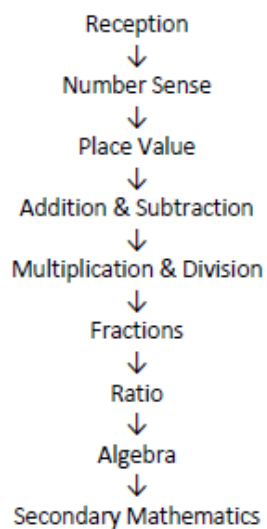
Calculations policy

Year 1	Year 2	Year 3
Pupils memorise and reason with number bonds to 10 and 20 in several forms.	Practise addition to 20 and become increasing fluent in deriving facts.	Practise solving varied addition questions with two-digit numbers - the answers could exceed 100.
+ = signs and missing numbers Pupils need to understand the concept of equality and its meaning of 'the same as' before using the '=' sign. Calculations should be written either side of the equals sign so that the sign is not just interpreted as 'the answer'. 2 = 1 + 1 2 + 3 = 4 + 1 Missing numbers need to be placed in all possible places. 3 + 4 = □ □ = 3 + 4 7 = □ + 4 3 + □ = 7 Counting and Combining sets of Objects Combining two sets of objects (aggregation) which will progress onto adding on to a set (augmentation) 	Missing number problems e.g. $14 + 5 = 10 + \square$ $32 + \square + \square = 100$ $35 = 1 + \square + 5$ It is valuable to use a range of representations (also see y1). Continue to use number lines to develop understanding of: Adding in tens and ones $23 + 12 = 23 + 10 + 2$ $= 33 + 2$ $= 35$ Partitioning and bridging through 10. The steps in addition often bridge through a multiple of 10 e.g. Pupils should be able to partition the 7 to relate adding the 2 and then the 5. $8 + 7 = 15$ Adding 9 or 11 by adding 10 and adjusting by 1 e.g. Add 9 by adding 10 and adjusting by 1 $35 + 9 = 44$ Towards a Written Method Partitioning in different ways and recombine	Missing number problems using a range of equations as in Year 1 and 2 but with appropriate, larger numbers. Partition into tens and ones Partition both numbers and recombine. Add by partitioning the second number only e.g. $247 + 125 = 247 + 100 + 20 + 5$ $= 347 + 20 + 5$ $= 367 + 5$ $= 372$ Pupils need to be secure adding multiples of 100 and 10 to any three-digit number including those that are not multiples of 10. Towards a Written Method (with equipment) Introduce expanded column addition modelled with place value

The calculation policy is divided into four sections: addition, subtraction, multiplication and division. It follows the concrete, pictorial, abstract approach.

How are knowledge and skills built on through school?

Whole School Progression



Running alongside: Geometry, Measures, Statistics, Mathematical Talk, Reasoning and Problem Solving.

Year Group	Mastering Number
Reception	Core approach to early number development
Year 1	Daily 15–20 minute session
Year 2	Daily 15–20 minute session
Year 3	Daily 15–20 minute session
Year 4	Daily 15–20 minute session
Year 5	Number fluency developed through the mathematics curriculum
Year 6	Number fluency developed through the mathematics curriculum

Element	Purpose
Daily Mathematics Lesson (45–60 minutes)	Teach the National Curriculum through the NCETM Teaching for Mastery approach.
Mastering Number (Reception–Year 4, 15–20 minutes)	Develop number sense, fluency and confidence through carefully sequenced daily sessions.
Retrieval and Arithmetic Practice	Consolidate prior learning and strengthen long-term retention through regular review.

Medium Term Plans

RECEPTION AUTUMN 1 MEDIUM-TERM PLAN

Mastering Number with wider early mathematics

ACADEMIC YEAR
2026 / 2027

Curriculum basis: the school's Reception long-term plan, NCETM Mastering Number at Reception and KS1, NCETM Early Years materials, the statutory EYFS framework and Development Matters. This is an intentional sequence, not a rigid daily script.

AUTUMN 1 ROUTE Develop secure counting principles, subitising to 3, comparison, composition of 3 and 4, representation of numbers 1–4, matching/sorting, simple pattern and practical comparison of size, mass and capacity. Mastering Number remains the core daily teaching; wider mathematics is developed through adult-led experiences, routines, continuous provision and outdoor learning.

AUTUMN 1 AT A GLANCE

Week	Core focus	NCETM early mathematics area	Key representations / provision	Observation checkpoint
1	Transition, mathematical routines, matching and sorting	Cardinality and Counting; Pattern	Real objects, sorting hoops, songs	Baseline observations and language sample
2	Perceptual subitising to 3	Cardinality and Counting		
3	One-to-one correspondence and cardinality	Cardinality and Counting		
4	Compare amounts: more, fewer, same	Comparison		
5	Composition of 3	Composition		
6	Composition and representation of 4	Composition; Cardinality		
7	Consolidation and wider mathematics	All six areas		

INTENDED END POINTS Children increasingly count with one-to-one correspondence; more, fewer and same; explore how 3 and 4 are composed; and use developing

YEAR 5/6 CYCLE B AUTUMN 1 MEDIUM-TERM PLAN

Mixed-age Teaching for Mastery: Cycle B Units 1–3

ACADEMIC YEAR
2026 / 2027

Curriculum basis: the North West Maths Hub two-year rolling programme through the NCETM Curriculum Prioritisation materials, the school's Cycle B long-term plan, the National Curriculum and DfE Ready-to-Progress criteria.

AUTUMN 1 ROUTE Unit 1: Calculating using knowledge of structures (1) — 4 weeks. Unit 2: Multiples of 1,000 — 1 week. Unit 3: Numbers up to 10,000,000 — 2 weeks. Shared teaching uses common structures; independent outcomes are adapted for Year 5 and Year 6.

AUTUMN 1 AT A GLANCE

Week	Cycle B unit	Core focus	NCETM / PD	Main representation	Mixed-age checkpoint
1	Unit 1	Three-addend part-whole structures	Y6 U1; PD 1.28	Bar/part-whole models	Y5 identifies structure; Y6 generalises
2	Unit 1	Additive equivalence and compensation	PD 1.28/1.29	Balance, equation chains	Derive and justify related calculations
3	Unit 1	Multiplicative relationships and comparison	6AS/MD–1	Comparison bars, double lines	Distinguish additive/multiplicative
4	Unit 1	Efficient strategy selection and mastery check	6AS/MD–2	Mixed models	Explain efficiency and structure
5	Unit 2	Multiples of 1,000	PD 1.26	Place-value chart/counters	Compose/decompose and derive facts
6	Unit 3	Powers of ten and large-number composition	6NPV–1/2; PD 1.30	Powers ladder, place value	Read/write/transform large numbers
7	Unit 3	Number lines, scales and rounding	6NPV–3/4	Lines and scales	Reason about location and accuracy

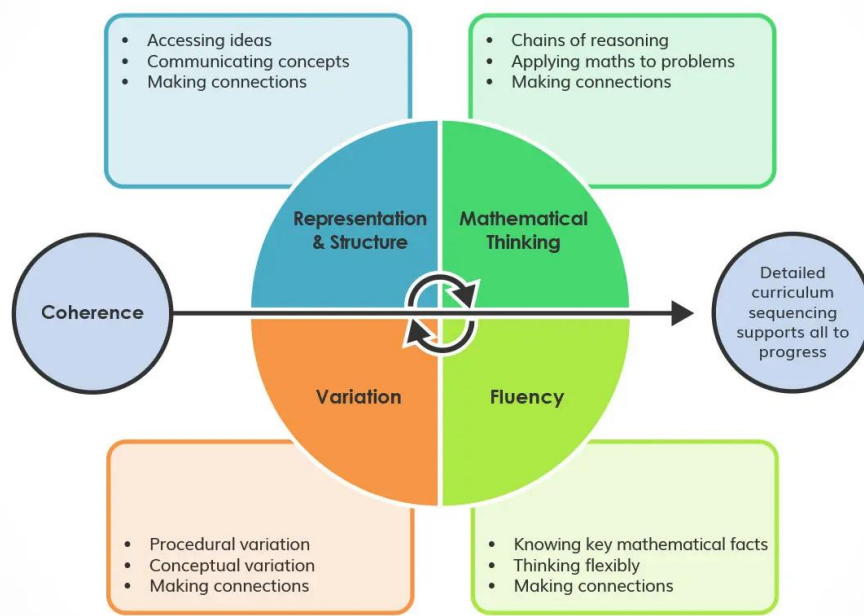
INTENDED END POINTS Pupils recognise and represent additive and multiplicative structures; use equivalence, inverse and compensation to derive calculations; select efficient strategies; compose and calculate with multiples of 1,000; understand powers-of-ten relationships; and read, compare, locate and round numbers up to 10,000,000. Year 5 pupils secure prerequisite knowledge while Year 6 pupils generalise and apply it.

We use the NCETM Maths Mastery approach and these medium term plans help sequence the learning for each area of maths.

We are a Maths Hub school and work closely with them. They run a series of nationally co-ordinated and accredited professional development projects which we are involved in. We use Mastering Number in KS1 as discrete lessons. We are also involved in the focus group linked to mixed age year group teaching.

Teaching for Mastery

Five Big Ideas



Times Tables Rock Stars



We use NumBots (EYFS/KS1) and Times Table Rock Stars (KS1/KS2) to support our learning of the four operations. We award certificates for attainment and effort on a weekly basis. We have a TTRS Day to promote how beneficial it is to know our multiplication tables!



Assessment

We use a number of formative assessment strategies in maths:

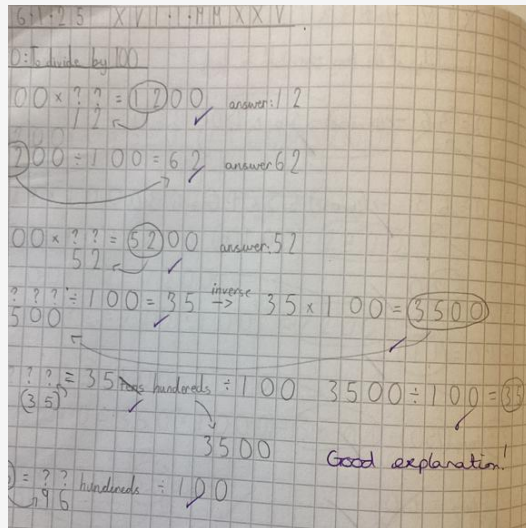
Live marking/feedback

Whole class questioning

Mini whiteboards

AfL lollipop sticks

Nest Pair Share



We assess the children termly using NFER assessments.

1

A table is **90** cm long.

It is put next to another table.

The other table is **65** cm long.



What is the total length of the two tables?

cm

1 mark

Challenge and Adaptations

We believe that maths should be accessible for all. Adaptations are planned into lessons. They might look like:

Use of additional resources – scaffolding (e.g. Visual representations – Dual coding, assisted technology, concrete resources)

Teacher expertise – e.g.; additional processing time, use of talk partners, scribing, modelling. I do , we do you do

Referring back to previous learning and vocabulary.

Pre-teaching vocabulary.

Use of visits and visitors.

Manipulatives

High quality teaching benefits pupils with SEND

The 'Five-a-day' principle



The research underpinning the EEF's guidance report 'Special Educational Needs in Mainstream Schools' indicates that supporting high quality teaching improves outcomes for pupils with SEND. Five specific approaches—the 'Five-a-day' indicated below—are particularly well-evidenced as having a positive impact. Teachers should develop a repertoire of these strategies, which they can use daily and flexibly in response to individual needs, using them as the starting point for classroom teaching for all pupils, including those with SEND.

1 Explicit instruction

Teacher-led approaches with a focus on clear explanations, modelling and frequent checks for understanding. This is then followed by guided practice, before independent practice.



2 Cognitive and metacognitive strategies

Managing cognitive load is crucial if new content is to be transferred into students' long-term memory. Provide opportunities for students to plan, monitor and evaluate their own learning.



3 Scaffolding

When students are working on a written task, provide a supportive tool or resource such as a writing frame or a partially completed example. Aim to provide less support of this nature throughout the course of the lesson, week or term.



4 Flexible grouping

Allocate groups temporarily, based on current level of mastery. This could, for example, be a group that comes together to get some additional spelling instruction based on current need, before re-joining the main class.



5 Using technology

Technology can be used by a teacher to model worked examples; it can be used by a student to help them to learn, to practice and to record their learning. For instance, you might use a class visualiser to share students' work or to jointly rework an incorrect model.

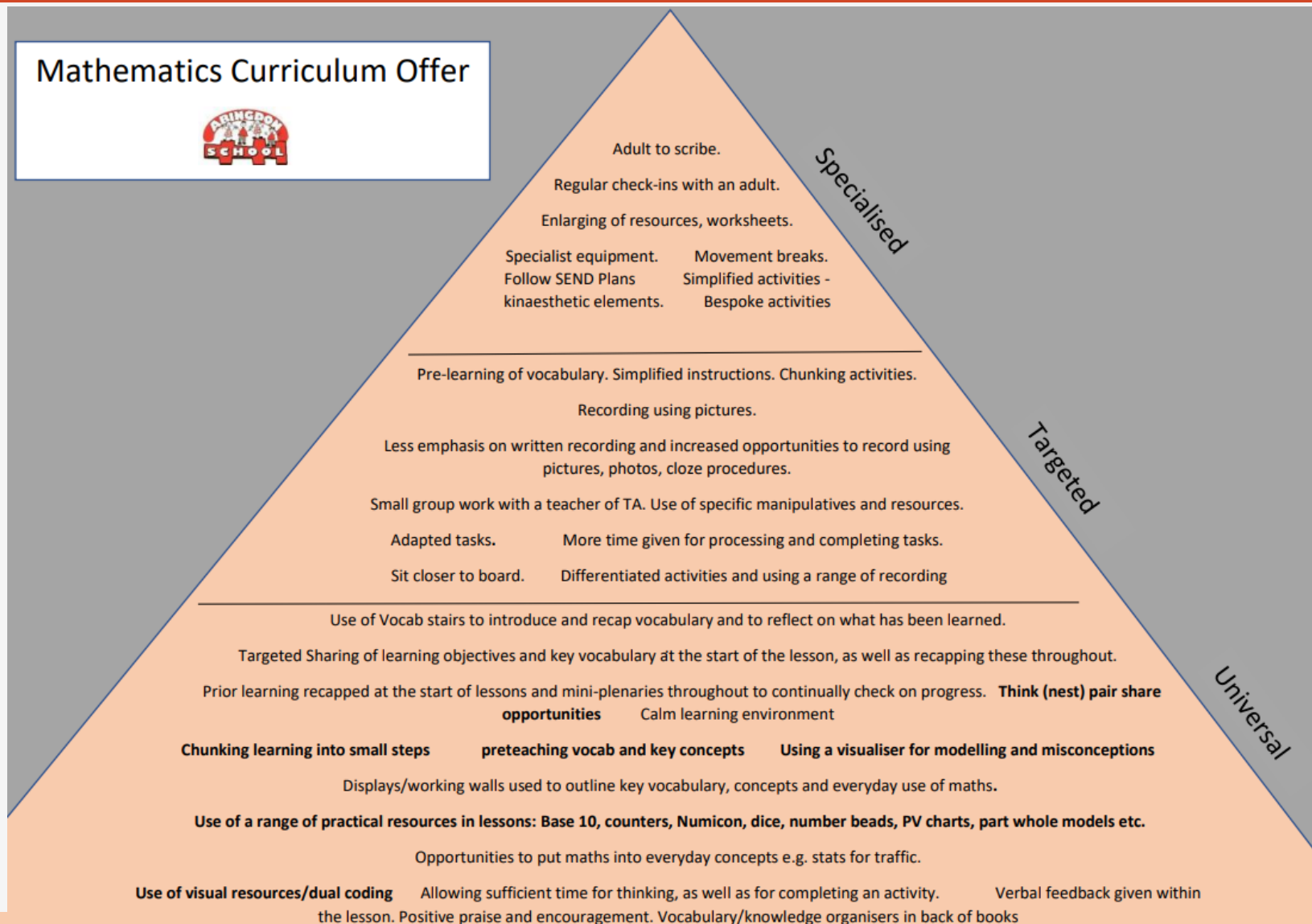


We use the Five a day principle alongside our own current focuses for adaptations:

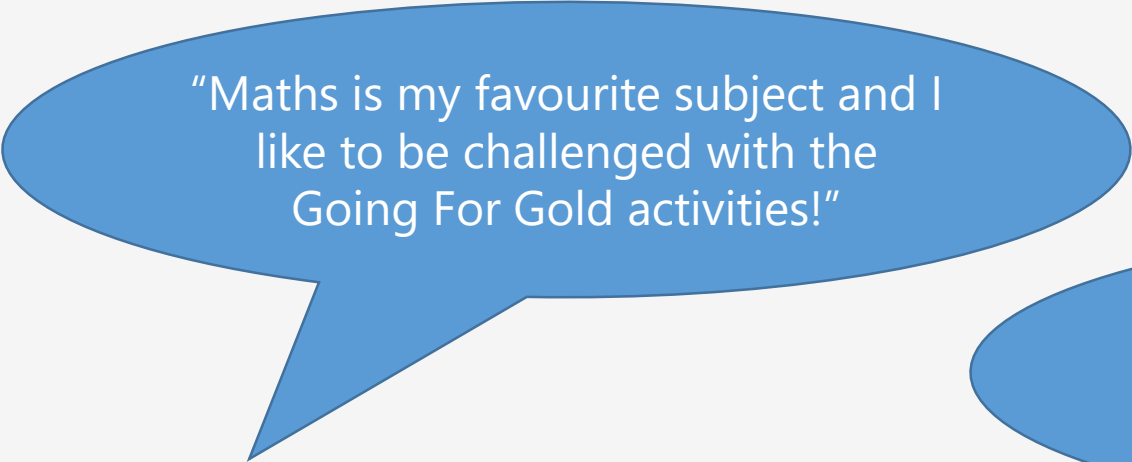
- 1) "Nest/Pair/Share"
- 2) Pre-teaching of vocabulary and any key concepts
- 3) Visual resources and dual coding across the whole school
- 4) Chunking learning
- 5) Using the visualiser for modelling and misconceptions

Provision Pyramids

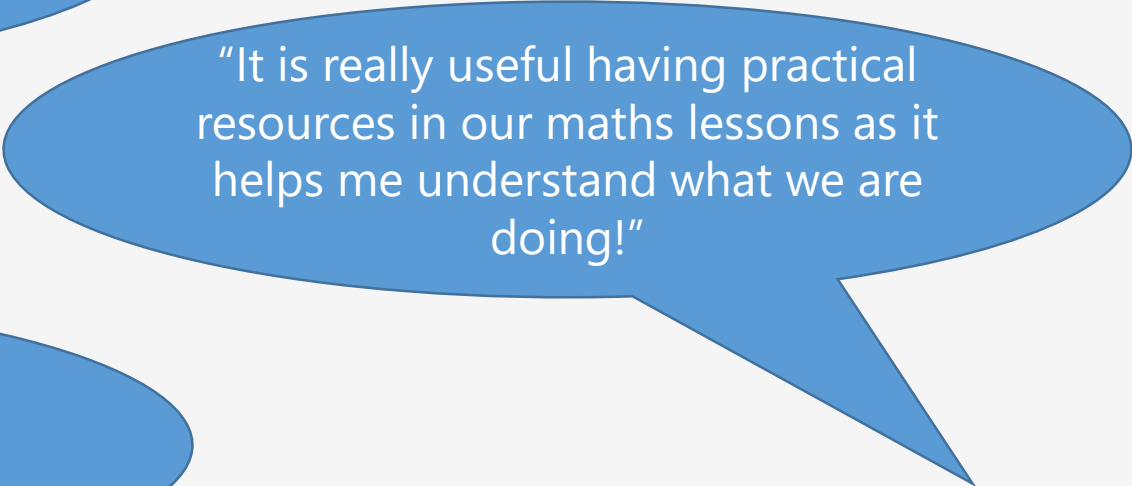
Mathematics Curriculum Offer



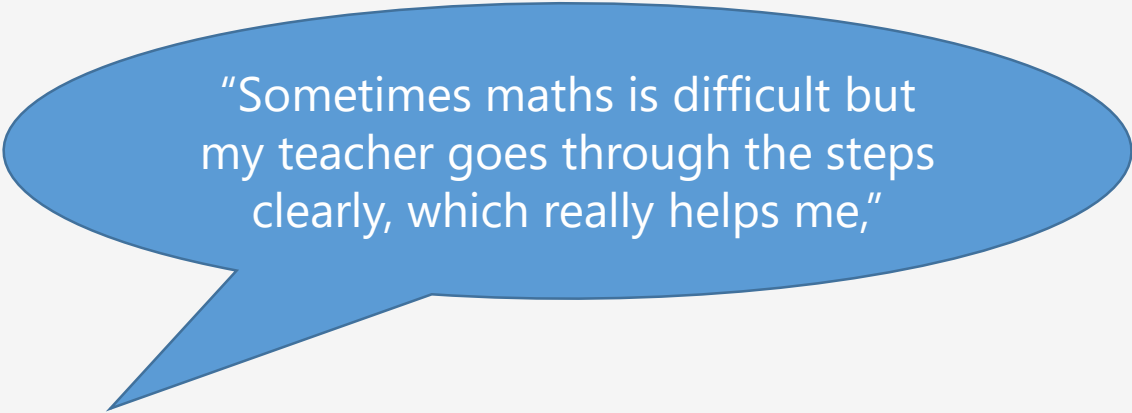
What do our children say about our curriculum?

A blue speech bubble with a white border and a tail pointing towards the bottom left.

"Maths is my favourite subject and I like to be challenged with the Going For Gold activities!"

A blue speech bubble with a white border and a tail pointing towards the bottom right.

"It is really useful having practical resources in our maths lessons as it helps me understand what we are doing!"

A blue speech bubble with a white border and a tail pointing towards the bottom left.

"Sometimes maths is difficult but my teacher goes through the steps clearly, which really helps me,"