Kindness Teamwork Curiosity

Maths Calculation Policy, Progression Document & Curriculum – February 2026

At Bushfield Road Infant School, we believe that mathematics is a vital subject that lays the foundation for children's lifelong learning and problem-solving skills. In line with our school values of kindness, teamwork, and curiosity, our maths curriculum is designed to nurture confident, inquisitive learners in an inclusive and supportive environment where children are able to sparkle. We recognise the importance of building solid mathematical foundations for all pupils, especially in a context where some children have gaps in prior knowledge. Our curriculum aims to ensure every child can access and enjoy maths, preparing them well for their next stage of education and beyond.

Key Aims

Our maths teaching focuses on developing secure understanding of core concepts through the carefully sequenced White Rose Scheme of Learning, adapted to meet the needs of all pupils. We aim to:

- Build strong foundational knowledge and fluency in number, calculation, and problem-solving skills.
- Foster curiosity by encouraging children to explore mathematical ideas and make connections.
- Promote teamwork through collaborative learning experiences where pupils support and learn from each other.
- Address gaps in knowledge by providing regular opportunities for revision and retrieval practice to deepen understanding and build confidence.
- Ensure all pupils, including those with additional needs, make sustained progress by adapting teaching approaches and resources.

Content and Skills

Pupils develop essential mathematical skills including number sense, counting, addition, subtraction, shape recognition, measurement, and early data handling. They learn to reason mathematically and apply their skills to solve practical problems. Fluency is developed through repeated practice and opportunities to revisit key concepts, ensuring knowledge is retained and built upon. Oral language and vocabulary specific to maths are explicitly taught to support comprehension and communication, reflecting our commitment to improving literacy across the curriculum.

Progression

Learning is carefully sequenced to revisit and reinforce prior knowledge, enabling pupils to build increasingly complex mental models. We move at a pace that suits the diverse needs of our pupils, ensuring no child is pushed ahead before they are ready. This approach supports pupils in closing any gaps from earlier learning and prepares them for the more abstract concepts they will encounter in Key Stage 2. Regular assessment and reflection help teachers identify and address individual needs, ensuring consistency and coherence throughout the phase.

Wider Impact

Mathematics at Bushfield Road Infant School contributes significantly to pupils' personal development by fostering resilience, confidence, and a positive attitude towards learning. By embedding kindness and teamwork within maths lessons, we create a respectful community where children learn to support each other's progress and celebrate achievements together. Our curriculum encourages curiosity and critical thinking, equipping pupils not only with mathematical skills but also with the confidence to tackle challenges in school and life. Ultimately, we aspire for all pupils to leave Key Stage 1 as enthusiastic, capable mathematicians who are well prepared for future learning and empowered to succeed in an ever-changing world.

Coverage

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Child led Nursery rhymes Provision stations	Child led Nursery rhymes Provision stations	Child led Nursery rhymes Provision stations	Child led Nursery rhymes Provision stations	Child led Nursery rhymes Provision stations	Child led Nursery rhymes Provision stations
Reception (EYFS)	Getting to Know You Match, Sort & Compare Talk About Measure & Patterns	It's Me 1,2,3 Circles & Triangles 1, 2, 3, 4, 5 Shapes with 4 Sides	Alive in 5 Mass & Capacity Growing 6, 7, 8	Length, Height & Time Building 9 & 19 Explore 3D Shapes	To 20 & Beyond How Many Now? Manipulate, Compose & Decompose	Sharing & Grouping Visualise, Build & Map Make Connections Consolidation
Year 1	Number & Place Value (within 10)	Addition and subtraction (within 10) Geometry: Shape	Number and place value (within 20) Addition and subtraction (within 20)	Number and place value within 50) Measurement: Length and height Measurement: Mass and volume	Multiplication and division Fractions Geometry: Position and direction	Addition & Subtraction (wit Number and place value (w 100) Measurement: Money Measurement: Time
Year 2	Number and place value	Addition and subtraction Geometry: Shape	Measurement: Money Multiplication and division	Addition & Subtraction Measurement: Length and height Measurement: Mass, capacity and temperature	Multiplication & Division Fractions Measurement: Time	Addition & Subtractio Statistics Geometry: Position and dir
Year 1 & 2 (202526)	Number and place value (within 20) Addition & Subtraction (within 20)	Place value (within 100 Y2) Shape	Place Value Addition & Subtraction (within 100) Multiplication & Division	Measurement: Length and Height Statistics	Addition & Subtraction (within 100) Multiplication & Division Money Fractions	Measurement: Time Measurement: Mass, capa temperature Geometry: Position & Dire

Progression

Progression at Bushfield Road Infant School begins in Nursery, where children are introduced to foundational mathematical concepts through play-based exploration, focusing on developing early number sense, pattern recognition, and language skills. In Reception, this learning is built upon with more structured opportunities to develop counting, simple calculation, shape, and measurement skills, supported by targeted teaching that addresses individual needs and gaps. By the time pupils enter Key Stage 1, they have a solid foundation of essential skills and mathematical vocabulary, enabling them to engage confidently with more formal mathematical concepts. Throughout this journey, the White Rose Scheme of Learning provides a coherent and carefully sequenced framework that revisits and reinforces prior knowledge, ensuring that children master key ideas before progressing. This approach supports sustained progress, helping pupils to build increasingly complex mental models and prepares them thoroughly for future stages of mathematical learning.

Foundational Knowledge and Skills:

Strand	Nursery:	Reception:	Year One:	Year Two:	Year Three (Brumby Outwood):
Number: Early Number Sense	Explore quantity through play (1–3)	Subitise small quantities	Recognise and represent numbers to 10	Secure recognition to 50 and place value	Secure place value to 1000
Number: Counting	Develop 1:1 correspondence	Understand cardinality	Count forwards/backwards within 20	Count to 100 forwards/backwards	Count in multiples (4, 8, 50, 100)
Number: Counting	Count objects up to 5	Count reliably to 20	Count within 50	Understand place value to 100	Read/write numbers to 1000
Number: Composition	Begin number sequence to 5	Compose numbers to 10	Partition into tens and ones	Flexibly partition numbers	Partition into hundreds, tens and ones
Number: Comparison	Compare groups (more/less)	Compare quantities	Understand tens and ones	Use place value in calculation	Compare and order numbers to 1000
Number: Multiplicative Thinking	Explore patterns	Create repeating patterns	Count in 2s, 5s, 10s	Recall multiplication/division facts	Recall 3, 4, 8 times tables

Problem Solving	Sort by attribute	Sort and group objects	Solve one-step problems	Solve multiplication/division problems	Solve two-step problems
Geometry: Shape	Recognise basic shapes	Name shapes	Identify 2D/3D shapes	Describe properties of shapes	Draw and identify angles and lines
Measurement	Talk about size	Compare size and measure	Compare using informal measure	Use standard units	Measure length, mass, volume accurately
Geometry: Position & Direction	Use positional language	Describe position and time	Describe position and movement	Use precise positional language	Use turns and angles (right angle, half turn)
Measurement: Time	Talk about routines	Sequence daily events	Tell time (hour/half)	Tell time to 5 minutes	Tell time to nearest minute
Calculation	Explore addition through play	Solve practical add/subtract	Use number facts to 10/20	Use efficient calculation strategies	Use formal written methods (column addition/subtraction)
Reasoning		Explain thinking	Explain reasoning	Justify reasoning	Explain reasoning with increasing clarity
Fractions		Explore halves practically	Understand halves/quarters	Recognise fractions and equivalence	Understand tenths and simple fractions
Statistics		Sort and classify data	Interpret pictograms	Collect and interpret data	Present and interpret data (bar charts)
Measurement: Money			Recognise coins	Solve simple money problems	Add and subtract money (including decimals)
Measurement: Estimation		Compare informal measure	Use non-standard units	Estimate and check answers	Estimate and compare measures

Curriculum Progression:

Curriculum Strand	Nursery	Reception:	Year One:	Year Two:	Year Three:
Number and Place Value:	Be aware of numbers 1 to 3 through everyday experiences; Know numbers 1 to 5 and their sequence; Count objects reliably up to 5	Subitise small quantities without counting; Understand that numbers to 10 can be made of different parts; Count objects reliably up to 20; Compare quantities using terms like more, less, equal	Recognise numbers to 10, understand quantity concepts; Counting forwards and backwards within 20; Count forwards and backwards within 50; Recognise numbers to 50, understand tens and ones; Understand place value of 10s and 1s; Count in multiples of 2, 5 and 10; Count to 100, forwards and backwards	Recognise place value in 2-digit numbers; Compare and order numbers to 100; Count in steps of 2,3,5,10	Numbers to 1000 Partition numbers Counting in 100s Finding 1, 10 and 100 more or less than a number. Counting in 50
Addition and Subtraction:		Solve simple addition and subtraction problems	Use + - =; Number bonds to 20; Add/subtract within 20; Solve one-step problems	Recall facts to 20; Add/subtract 2-digit numbers; Solve problems; Use inverse	Involving numbers within 1000 Solving word problems
Multiplication and Division:			Count in multiples of 2, 5 and 10 Solve multiplication/division using objects and arrays	Recall multiplication and division facts for 2, 5, 10; Solve practical problems involving multiplication and division	Multiplying and dividing by 3 Multiplying and dividing by 4 Multiplying and dividing by 8 Solving problems with multiplication and division

Fractions:			Begin understanding halves and quarters practically	Recognise and use simple fractions (1/2, 1/4, 1/3); Recognise the equivalence of 2/4 and 1/2; Understand halves in practical contexts	Unit and non-unit fractions Making the whole Counting with tenths Fractions as numbers Fractions as a set of objects Problem solving with fractions
Shape:	Recognise basic shapes such as circle and square; Identify and name simple 2D shapes	Identifying, describing, and manipulating common 2D and 3D shapes	Identify basic 2D shapes (circle, square, triangle); Name common 2D and 3D shapes; Describe and name basic shapes	Identify properties of simple 2D and 3D shapes; Describe properties of 2D and 3D shapes using vocabulary; Describe shapes using correct mathematical terms	Recognising and describing 2D and 3D shapes Understand and classify angles Recognise and identify right angles Types of lines
Measurement:	Understand size concepts including big and small	Use everyday language to describe size, position and time; Use everyday language to describe time	Measure and compare; Tell time to hour and half hour; Recognise coins; Sequence time	Measure with standard units; Tell time to 5 minutes including quarter past/to; Use £ and p; Compare measures	Measuring mass Comparing mass Adding and subtracting masses Solving problems Measuring capacity Comparing capacities Adding and subtracting capacities Solving problems involving capacity

Position and Direction:	Use positional language		Describe position and direction	Use movement and direction including turns.	
Statistics and Patterns:	Recognise patterns	Create repeating patterns	Sort objects into categories. Ask and answer simple questions about groups of objects.	Interpret and construct simple pictograms, tally charts, block diagrams, and simple tables.	Interpreting and creating pictograms Interpreting and creating Bar charts Interpreting and creating Tables

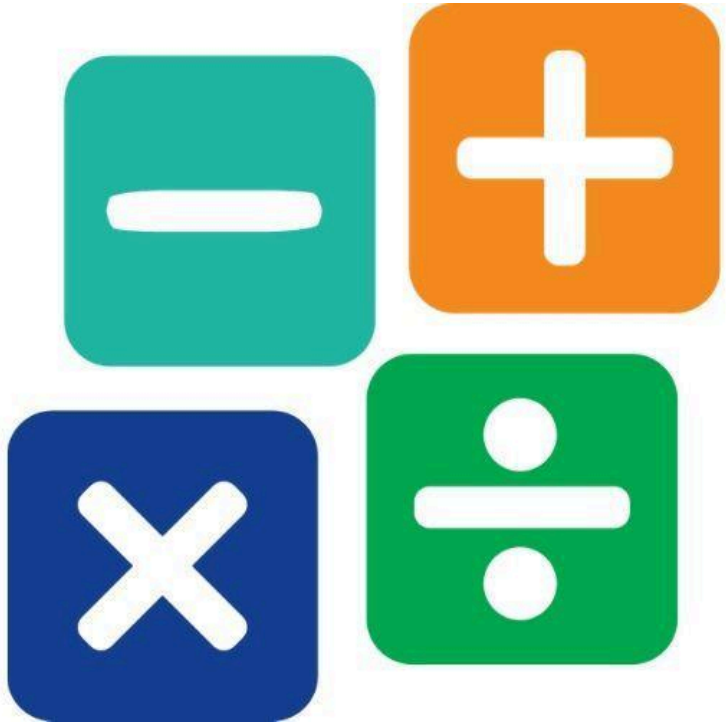
Vocabulary Progression:

Curriculum Strand	Nursery	Reception:	Year One:	Year Two:
Number and Place Value:	one, two, three, more, less, same, big, small	count, subitise, fewer, equal, before, after, next	number, numeral, digit, more than, less than, one more, one less, tens, ones	place value, compare, order, greater than (>), less than (<), partition, estimate
Addition and Subtraction:	add, take away, more, less	add, subtract, total, altogether, how many left	plus, minus, equals, number sentence, difference, solve	addition, subtraction, inverse, calculate, fact family
Multiplication and Division:	share, same	share, equal, group, lots	equal groups, arrays, rows, columns, repeated addition	multiply, divide, product, times, remainder
Fractions:	half	half, whole, equal parts	half, quarter, one quarter	fraction, numerator, denominator, equivalent, one third
Shape:	circle, square, shape	triangle, rectangle, side, corner	2D shape, 3D shape, cube, sphere	vertex, edge, face, symmetry, polygon
Measurement:	big, small, heavy, light	long, short, full, empty, time	length, height, weight, hour, o'clock, half past	centimetre, metre, kilogram, litre, minute, quarter past, quarter to, pound (£), pence (p)
Position and Direction:	in, on, under, over	next to, behind, in front, between	left, right, forwards, backwards, above, below	clockwise, anticlockwise, quarter turn, half turn

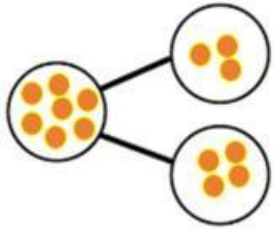
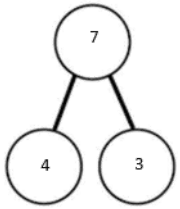
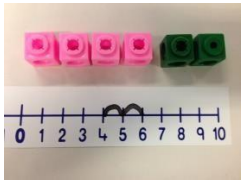
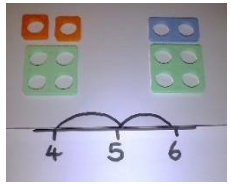
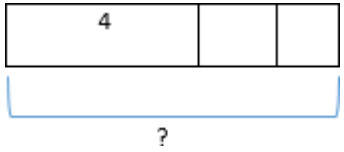
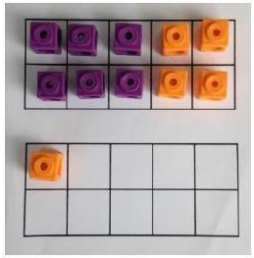
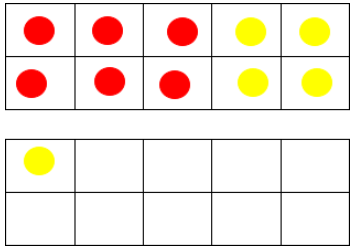
Statistics and Patterns:	sort, same, different big, small, colour, shape	group, match again, repeat, same pattern	data, category, more/less, question, answer describe, what comes next?, continue	pictogram, tally, chart, table explain, describe rule

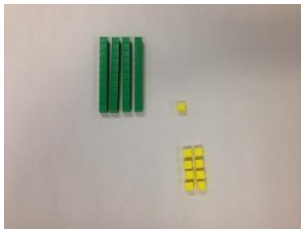
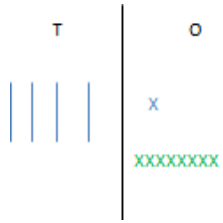
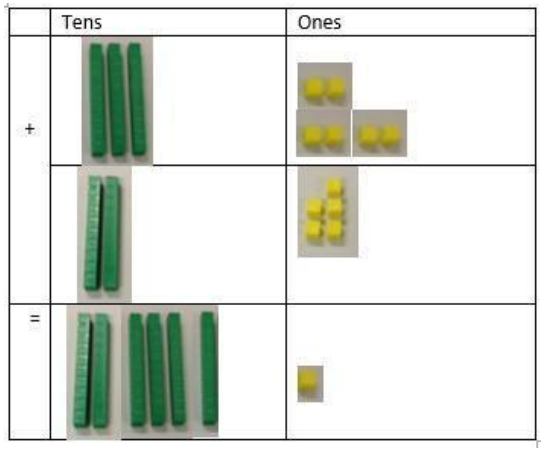
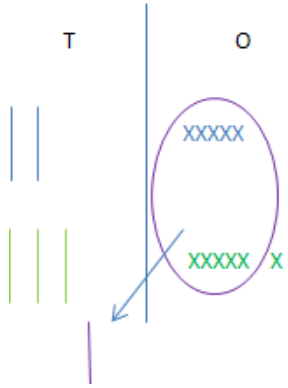
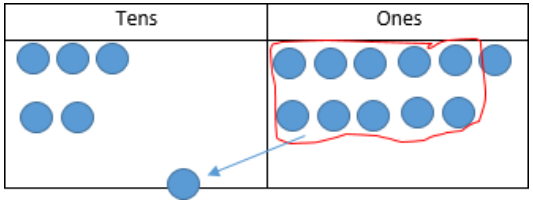
Calculation Policy

At Bushfield Infants, our calculation policy is firmly grounded in the principles and progression outlined by White Rose Maths, ensuring a coherent and systematic approach to teaching calculation across the school. We recognise that every pupil has unique learning needs, and therefore, while we follow the White Rose framework as our core guide, we adapt and tailor calculation methods where necessary. This flexibility ensures that our approach is inclusive and responsive, providing all pupils (regardless of their individual needs) with the best possible opportunities to develop their mathematical understanding and fluency.

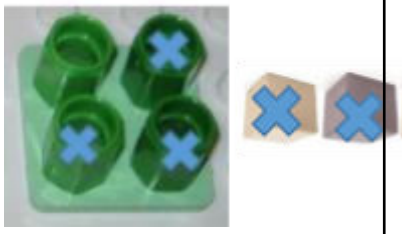
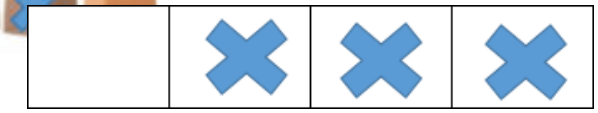
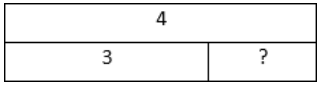
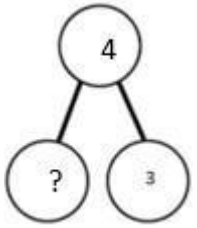
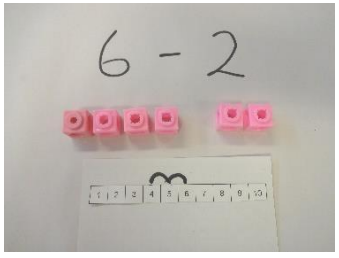
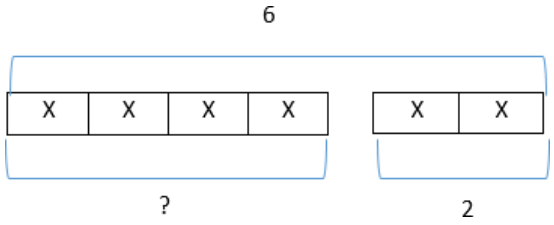
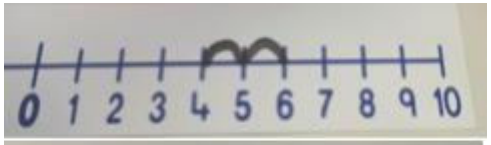
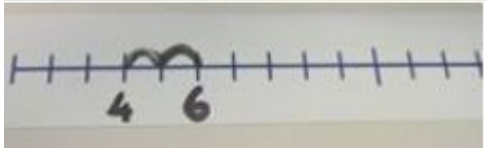


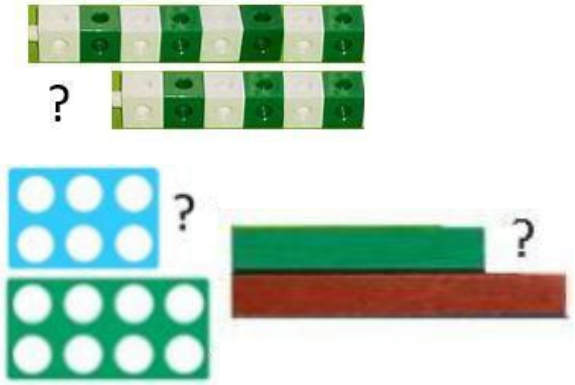
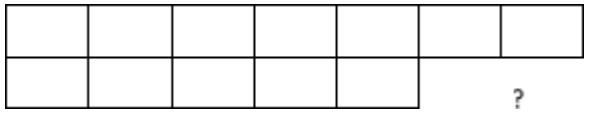
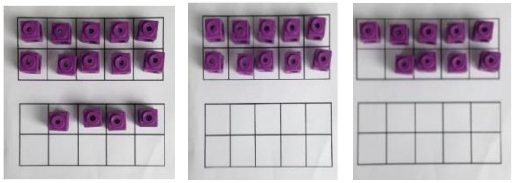
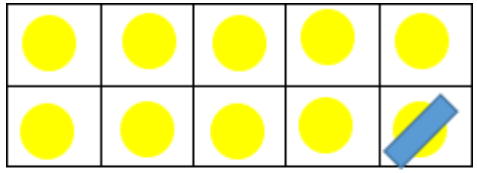
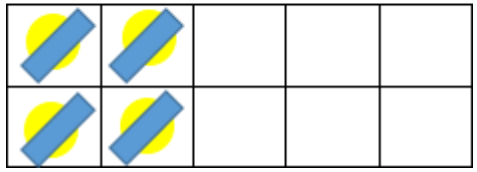
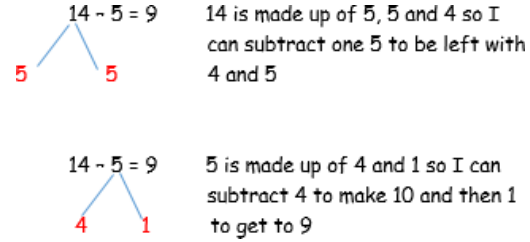
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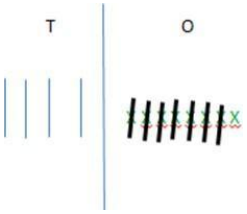
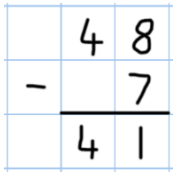
Concrete	Pictoral	Abstract
Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears etc)  		4 + 3 = 7 (four is a part, 3 is a part and the whole is seven) 
Counting on using number lines by using cubes or numicon  	A bar model which encourages the children to count on 	The abstract number line: What is 2 more than 4? What is the sum of 4 and 4? What's the total of 4 and 2? 4 + 2 
Regrouping to make 10 by using ten frames and counters/cubes or using numicon: 6 + 5  	Children to draw the ten frame and counters/cubes 	Children to develop an understanding of equality e.g 6 + ☐ = 11 and 6 + 5 = 5 + ☐ 6 + 5 = ☐ + 4

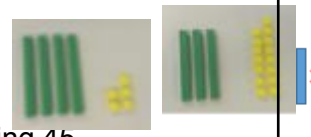
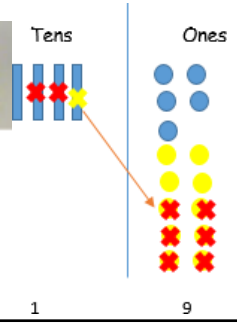
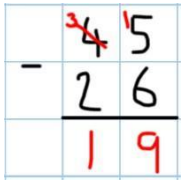
TO + O using base 10. Continue to develop understanding of partitioning and place value 41 + 8 	Children to represent the concrete using a particular symbol e.g. lines for tens and dot/crosses for ones. 
TO + TO using base 10. Continue to develop understanding of partitioning and place value and use this to support addition. Begin with no exchanging. 36 + 25 	This could be done one of two ways:  

Subtraction:

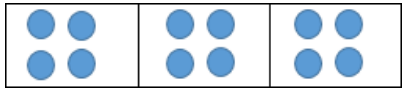
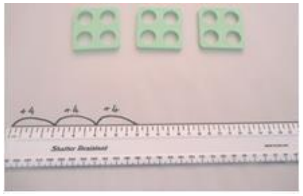
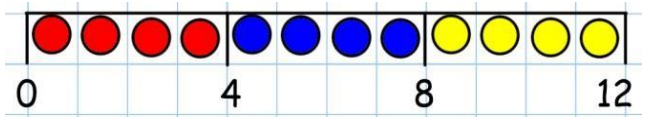
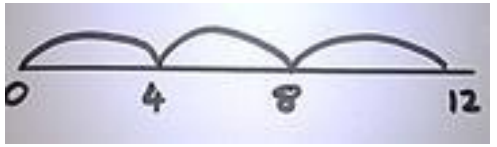
Concrete	Pictoral	Abstract
Physically taking away and removing objects from a whole (use various objects too) rather than crossing out- children will physically remove the objects 4 – 3 = 1 	Children to draw the concrete resources they are using and cross out.  Use of the bar model: 	**4- 3 =** **= 4 – 3** ☐  
Counting back (using number lines or number tracks) 	Children to represent what they see pictorially e.g. 	 

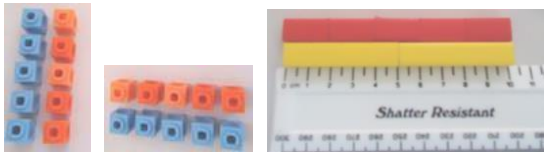
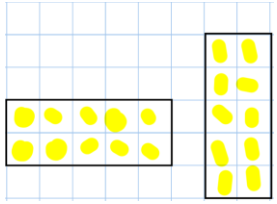
Finding the difference (using cubes, numicon or Cuisenaire rods, other objects can also be used) 	Children to draw the cubes/other concrete objects which they have used XXXXXXXX XXXXXX Use of the bar model 	Find the difference between 8 and 6. 8 – 6, the difference is ? Children to also explore why 9 - 7 = 8 – 6 (the difference, of each digit, has changed by 1 do the difference is the same- this will help when solving 10000-9987)
Making 10 (using numicon or ten frames) 14 – 5  **C**hildren could also do this by subtracting a 5 from the 10. 	Children to present the ten frame pictorially  	14 – 5 = 9 You also want children to see related facts e.g. 15 – 9 = 5 Children to represent how they have solved it e.g. 
Column method (using base 10) 48-7		48 – 7 =

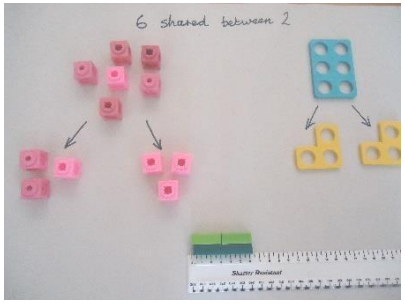
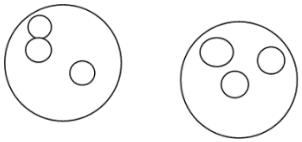
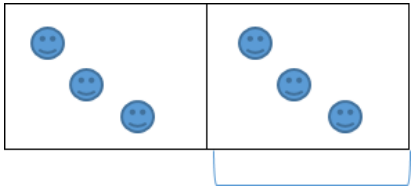
Column method (using base 10 and having to exchange) **45-26**  1) Start by partitioning 45 2) Exchange one ten for ten more ones Subtract the ones, then the tens.	**Represent the base 10 pictorially** 	It's crucial that the children understand that when they have exchanged the 10 they still have 45. 45 = 30 + 15 

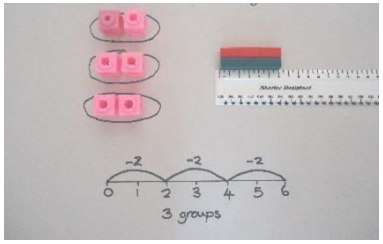
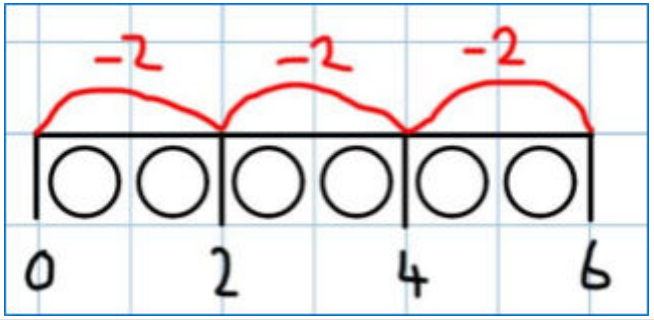
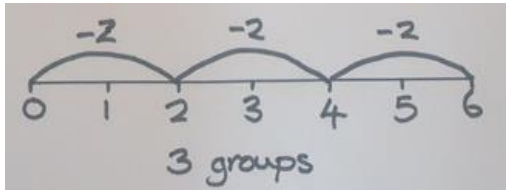
Multiplication:

Concrete	Pictoral	Abstract
Repeated grouping/repeated addition (does not have to be restricted to cubes) 3 x 4 or 3 lots of 4 	Children to represent the practical resources in a picture e.g. XX XX XX XX XX XX Use of a bar model for a more structured method 	3 x 4 4 + 4 + 4
Use number lines to show repeated groups- 3 x 4  	Represent this pictorially alongside a number line e.g: 	Abstract number line **3 x 4 = 12** 
Use arrays to illustrate commutativity	Children to draw the arrays	Children to be able to use an array to

(counters and other objects can also be used) **2 x 5 = 5 x 2** 		write a range of calculations e.g. 2 x 5 = 10 5 x 2 = 10 2 + 2 + 2 + 2 + 2 = 10 5 + 5 =10

Division:

Concrete	Pictoral	Abstract
6 shared between 2 (other concrete objects can also be used e.g. children and hoops, teddy bears, cakes and plates) 	 This can also be done in a bar so all 4 operations have a similar structure: 	6 ÷ 2 = 3 What's the calculation? 3 | 3
Understand division as repeated grouping and subtracting 6 ÷ 2		Abstract number line

-2 -2 -2 0 1 2 3 4 5 6 3 groups	-2 -2 -2 0 2 4 6	-2 -2 -2 0 1 2 3 4 5 6 3 groups