

Blenheim Park Academy Calculation Policy October 2023

Implementation

Blenheim Park EYFS has adopted White Rose's curriculum documents. This policy sets out the school's approach to Early Years maths as it dovetails into Power Maths that begins in Year 1. At Blenheim Park we see the importance of moving from concrete to pictorial and then abstract recording, leading to more formal written methods. At Blenheim Park we recognise that the Concrete Pictorial Abstract (CPA) approach is highly effective in the teaching of Maths to develop conceptual understanding. Manipulatives (objects), pictorial representations, words, numbers and symbols are all around the classroom, as well as being freely available to the children to use as they require them. The White Rose approach incorporates these to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding. Together, these elements help cement knowledge so pupils truly understand what they've learnt. All pupils, when introduced to a key new concept, will have the opportunity to build competency in this topic by taking this approach. Pupils are encouraged to physically represent mathematical concepts. Objects (manipulatives) and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.

Impact

Pupils will leave us prepared for the next stage in their lives with:

- Quick recall of facts and procedures
- The flexibility and fluidity to move between different contexts and representations of mathematics
- The ability to recognise relationships and make connections in mathematics
- Confidence and belief that they can achieve
- The knowledge that maths underpins most of our daily lives
- Skills and concepts that have been mastered
- Have a positive and inquisitive attitude to mathematics as an interesting and attractive subject in which all children gain success and pleasure.

A mathematical concept or skill has been mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations and this is the goal for our children. These will be assessed through-observations of both adult led activities and independent, child led activities, tracking, pupil progress meetings, moderation and standardisation.



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Addition	Subtraction	Multiplication	Division
Children are encouraged to gain a sense	Children are encouraged to gain a sense	Children use concrete objects to make	Children use concrete objects to count
of the number system through the use	of the number system through the use	and count equal	and share equally into 2 groups.
of counting concrete objects.	of counting concrete objects.	groups of objects.	
	They understand subtraction as counting out		6 cakes shared between 2 people each person gets 3 cakes. 6 ÷2 = 3 They count a set of objects and halve them by making two equal groups
They combine		They will count on in	ment by making two equal groups.
objects	They begin to count back in ones and	twos using a bead	They understand sharing and halving as
in practical	twos using objects cubes bead strings	string and number line	dividing by 2
ways and	and number		
count all. 5	lines.	They understand	They will begin to use objects to make
They		doubling as repeated	groups of 2 from a given amount.
understand addition as counting on and	They use concrete and pictorial	addition.	
will count on in ones and twos using	representation to record their	2 + 2 = 4	They use concrete and pictorial
objects cubes bead string and number	calculations.		representation to record their
line.		They use concrete and pictorial	calculations.
1 2 3 4 5 6 7 8 9 10	They begin to use - and =	representation to record their	
They use concrete and pictorial		calculations.	Higher attaining children may be able to
representation to record their	They are encouraged to develop a		represent their calculations using
calculations.	mental picture of the number system in	Higher attaining children may be able to	symbols and numbers within a written
They begin to use + and =	their heads to use for calculations.	represent their calculations using	calculation.
They are encouraged to develop a	l liskan attaining shildren may be shlata	symbols and numbers within a written	
mental picture of the number system in	Algher all taining children may be able to		$\cap \cap \Theta$
their heads to use for calculations.	symbols and numbers within a written		
Higher attaining	calculation		000
children may be able to IIII - II = O			
represent their			
calculations using			
sympols and numbers			
within a written calculation.			