Northwood Whole School Times Table Strategy

Rationale and Intent

- While we acknowledge that memorising facts is important, we aim to ensure children build a deep understanding of times tables.
- We provide a wide range of representations to ensure learning is deeply embedded.
- Our approach ensures "automaticity"*

Memorisation of basic facts usually refer to committing the result of operations to memory so that thinking is unnecessary......Teaching facts for automaticity in contrast relies on thinking. Answers to facts must be automatic, but thinking about the relationships among the facts is critical. A child can then think of 9x6 as (10x6)-6.

Components and Structure

| Component 1	Component 2
Regular retrieval practice to develop fluency (5/10 minutes 3 to 5 times per week) *Emphasis on saying (and hearing) the sound pattern of the place is important and can lead to verbal prediction and patterning – should include conceptual support.*	Three dedicated whole Maths lessons every half term (at least 40 minutes in length) *To explore each new times table – developing connections, exploring patterns and creating a deeper understanding of multiplicative reasoning with a specific focus on this new times table*
Structure	
Four pre-requisites and eight whole school steps (implementation strategy) Pre-requisites are what children must know about multiplication, before they embark on learning times tables and include: • Unitising • Understanding equal and unequal groups	

- Combining equal groups
- Understanding the early relationship between repeated addition and the times sign

Implementation

YR	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
1	Experience of counting in 1s, 2s, 5s,10s					
2	1x	(1x) 2x	5x	(5x) 10x	0x	REVISION
3	(2x) 4x	(4x) 8x	3x	(3x) 6x	(6x) 12x	REVISION
4	9x	7x	11x	Squares	REVISION	Test in June

Steps to Success

- When introducing a new times table, it is imperative that links are made to the real world – e.g. "What comes in 2s?" shoes, socks, eyes, glasses, ears, etc.
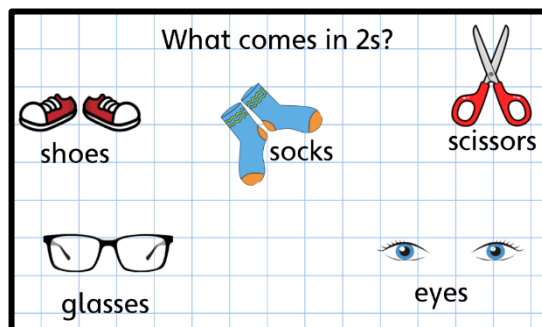
- Where appropriate, use long term display which are added to half-termly:

- Any new learning should regularly be built around children's prior knowledge – see brackets above for specific times table links (to help with commutativity of facts)
- Each times table to be presented as follows:

$$1 \times 6 = 6$$
$$2 \times 6 = 12$$
$$3 \times 6 = 18$$
$$4 \times 6 = 24$$
$$5 \times 6 = 30$$
$$6 \times 6 = 36$$
$$7 \times 6 = 42$$
$$8 \times 6 = 48$$
$$9 \times 6 = 54$$
$$10 \times 6 = 60$$
$$11 \times 6 = 66$$
$$12 \times 6 = 72$$

- Explicit teaching and retrieval practise 3-5 times per week (5-10 minutes per session)
- Ensure Concrete-Pictorial-Abstract approach is followed for all children, using arrays as a key model to help children visualise their learning
- Revisit prior learning to explore patterns between facts and sequences, linking to other calculations e.g. $4 \times 7 = 28$ therefore $4 \times 70 = 280$