Welcome!

Monday 7th October
Mrs McVeigh
School Math's Lead

Aims of this workshop:

- To share our school's Maths Intent and Calculations Policy
- To understand why we use a "Mastery" approach to teaching mathematics and how we teach mixed age classes
- To know important assessment dates
- To provide ways to support your children at home

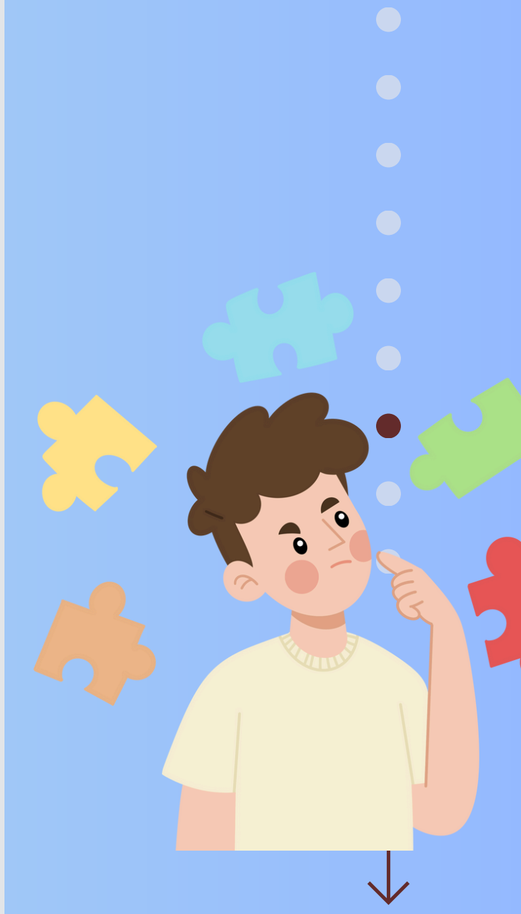
We aim to work with parents so that maths doesn't only happen at school.

Maths shouldn't stop when you leave school each day. Using quick number facts instead of using a calculator, problem solving out of tricky situations, or choosing a puzzle, board game or maths based game on electronic devices are all ways of using our maths skills!

≡ Our Maths Intent

In a world where number, measurement, geometry and statistics skills are needed in everyday life, we aim to teach all our children vital mathematical skills needed to problem solve and reason. Mathematical knowledge is critical for many subjects including science, technical engineering, computing and is needed in all forms of employment.

At Richard Hill, we recognise that thinking logically and approaching daily problems with perseverance is the key to mastering the National Curriculum. Through the teaching of progressive concrete, pictorial and abstract methods, using the White Rose and Mastering Number Schemes, our children develop a secure understanding of the number system enabling them to become inquisitive, investigative young people who enjoy being challenged.



How does our Maths curriculum fit into our “six strands”?

The mathematics curriculum offers the opportunities for children to develop their learning behaviours, in line with our Six Strands:

Boundaries: I respect others reasoning, share resources with peers, cope when I get an answer wrong and ask for help when needed.

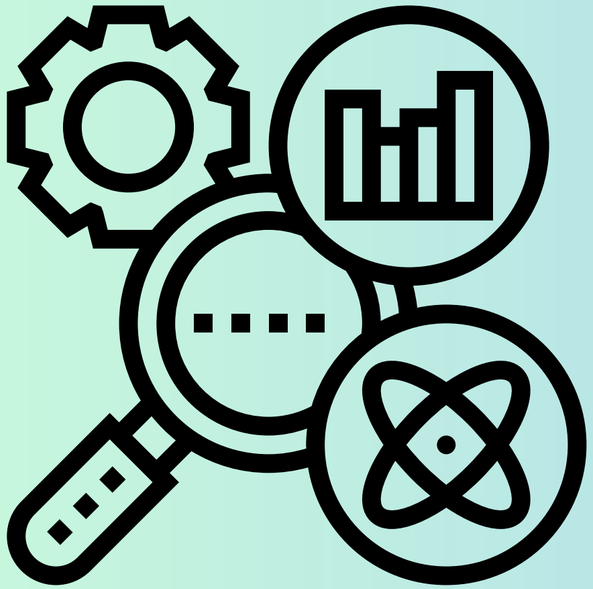
Resilience: I can cope when I get an answer wrong, ask for help when needed and listen to respond to feedback to improve my learning.

Focus: I can follow and carry out instructions given to me and remain on task.

Respect: I can prepare and tidy away independently, use equipment safely and always be respectful of my working environment.

Self-Regulation: I can calmly work my way through problems, accept when I have made a mistake and respond appropriately during lessons.

Independence: I am eager to learn, can start and finish my word independently and know how to use the resources and environment for support.

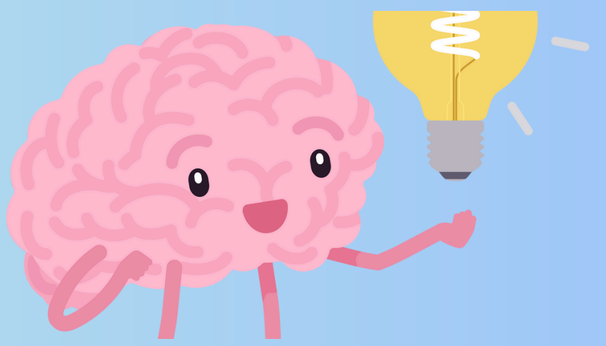


We are using evidence led, research based schemes to teach Maths from Nursery - Year 6, and have worked alongside The National Centre for Excellence on the Teaching of Mathematics (NCETM).

What else are our highly skilled teachers part of?

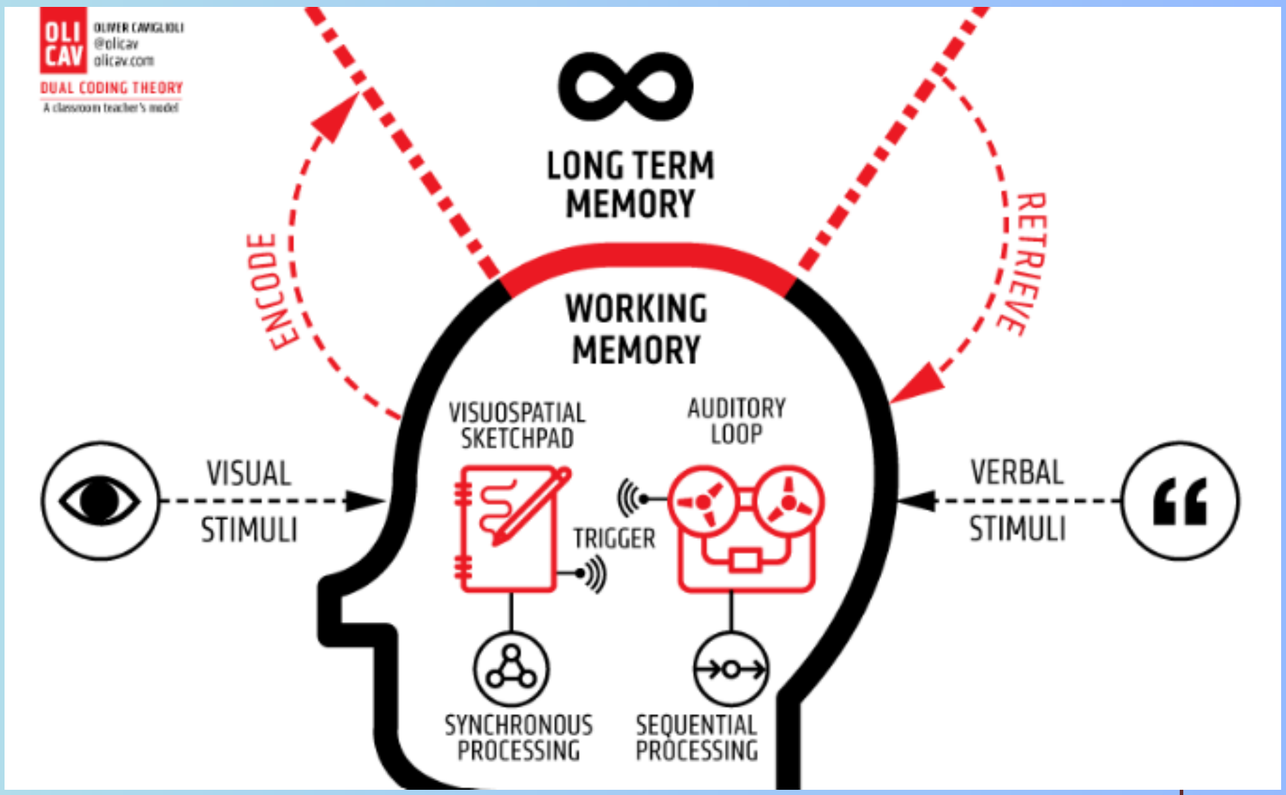
Mrs McVeigh:
East Midlands Maths Hub Sustaining Group
Miss Wood & Mr Smith:
KS1 & EYFS Mastering Number Sustaining Group
Mrs Tack & Mrs WH:
KS2 Mastering Number Implementation Group

What does the research say?



'Mastery has implications for **working memory and long-term memory.** The more the basics are practised, the more secure the links with underlying principles. The mastery curriculum in maths is also underpinned by reasoning and there are compelling reasons why reasoning should underpin other aspects of the curriculum as well. **Reasoning calls on us to justify, to explain and to make clear our rationale for doing something. It draws on both working and long term memory and supports its nature.**'

Mary Myatt; 2018

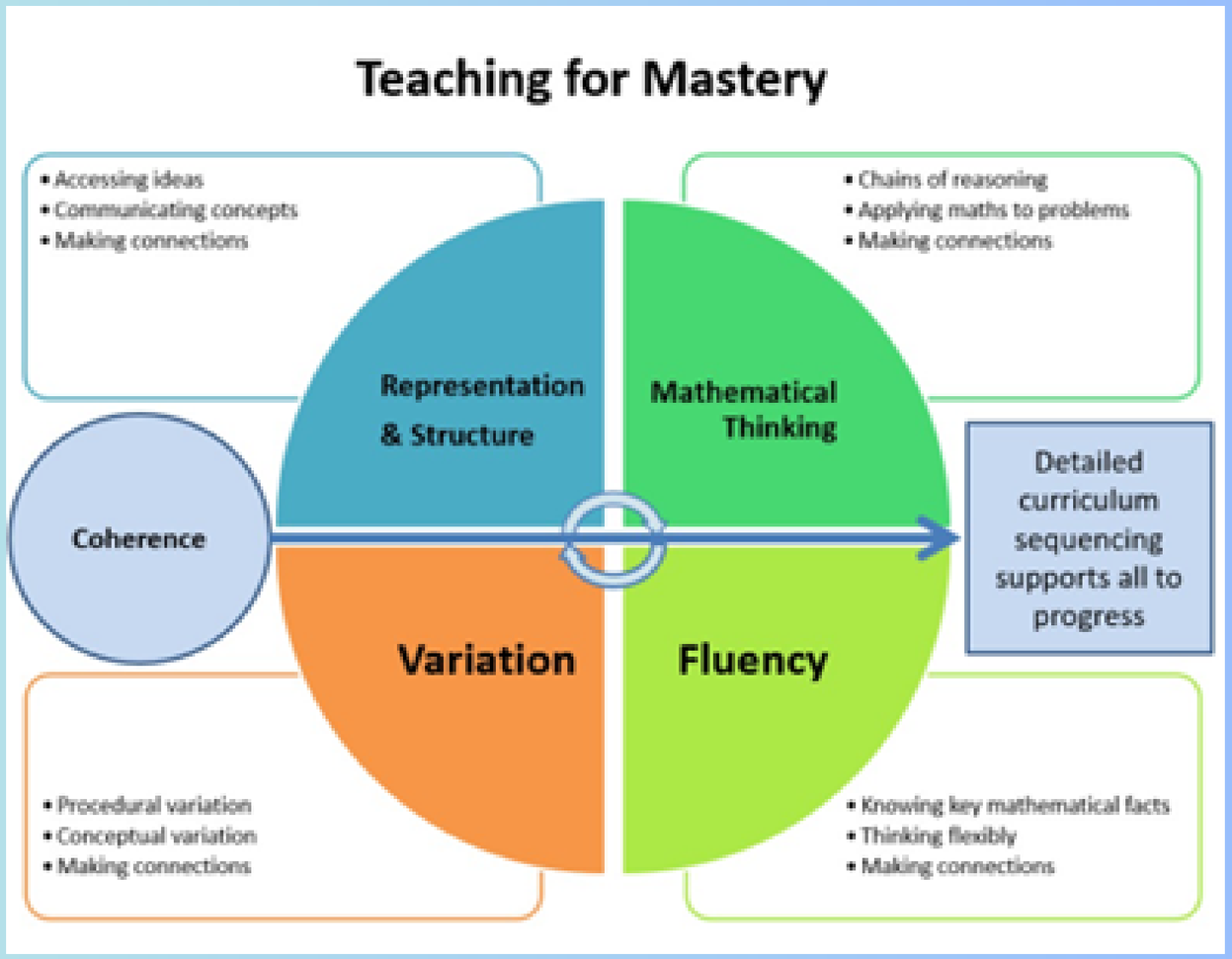


Willingham's simple model of memory; 2017

The Mastery Curriculum!

Richard Hill's Maths curriculum is designed around the Mastery Approach. Using the NCETM and Maths Hub research into "The Five Big Ideas", and the EEF's research into improving Mathematics in Key Stage 1 and Key Stages 2 and 3, we have created an agreed lesson structure to ensure all parts of the teaching for mastery diagram is embedded into our teaching.

The Five Big Ideas; NCETM (2017)



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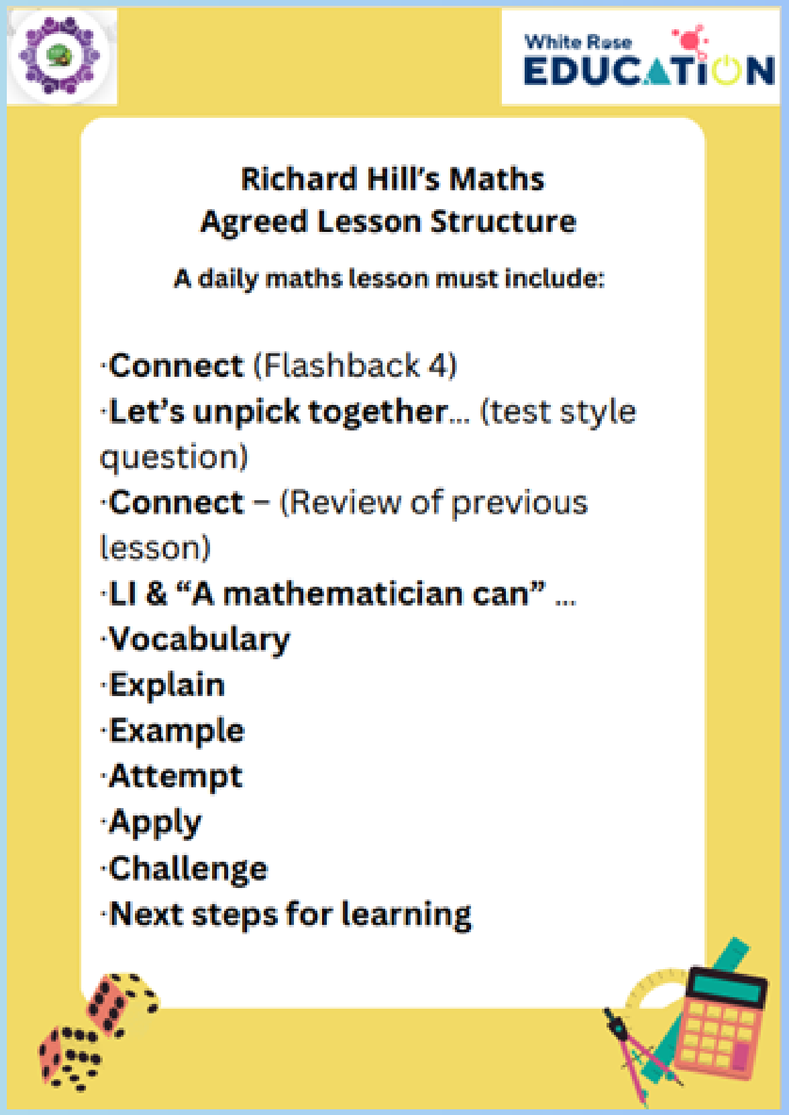


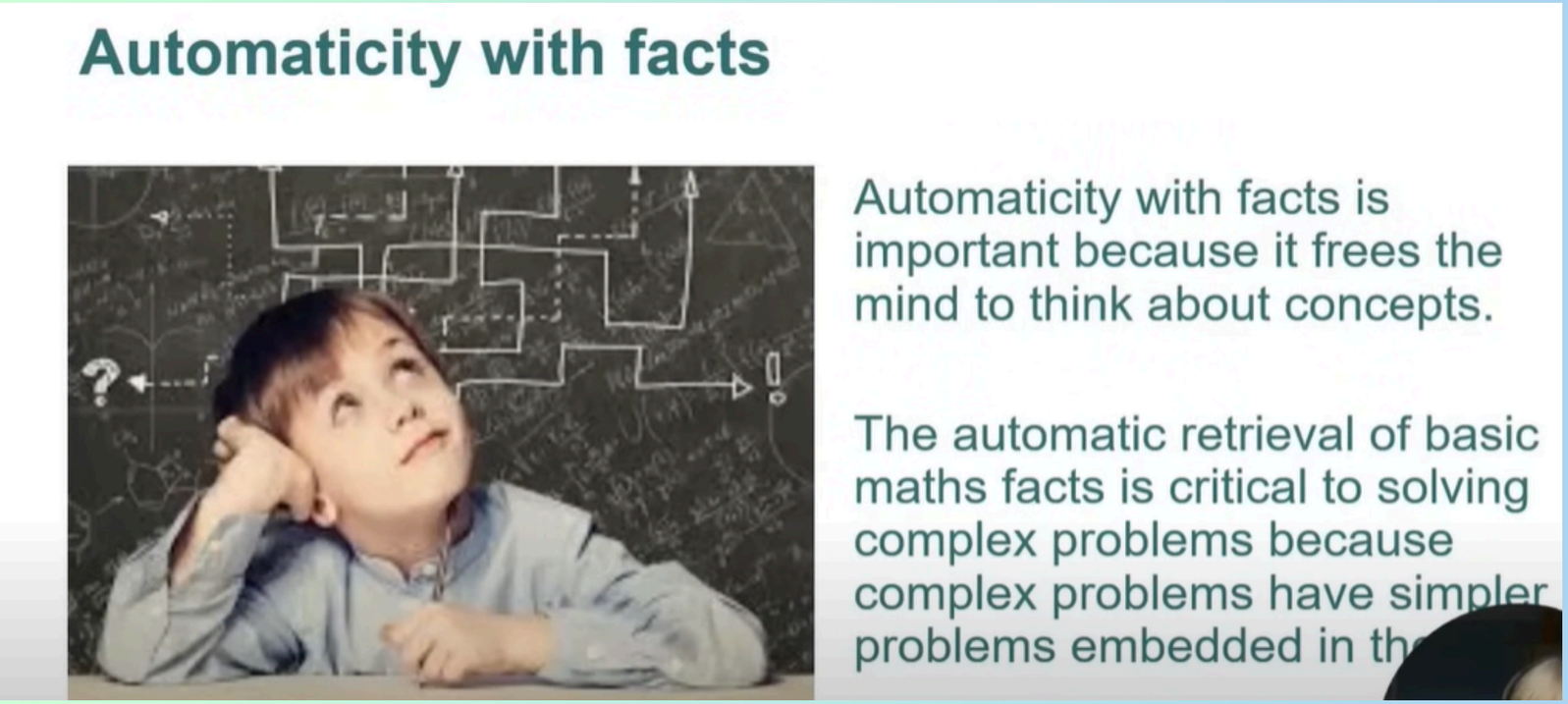
Mastery Curriculum using White Rose

High expectations that **all** pupils will achieve.

1 minute 30 - 5 minutes 30

Mastering Number at KS1 and Reception (youtube.com)

So how do we ensure we teach automaticity?



White Rose EDUCATION

NCETM
NATIONAL CENTRE for EXCELLENCE IN THE TEACHING OF MATHEMATICS

At Richard Hill, we use the scheme called “White Rose” alongside “Mastering Number”.

Calculations Policy

Richard Hill's EYFS Calculations Policy

please take one as you leave

Mixed Age Teaching

Mixed age – keeping both year groups together all of the time..

Multi age – possibly a small amount of introductory work together but most of the time working in separate year groups.

Mixed and multi-age (Times tables)

Single age

The children's Maths Journey at Richard Hill!

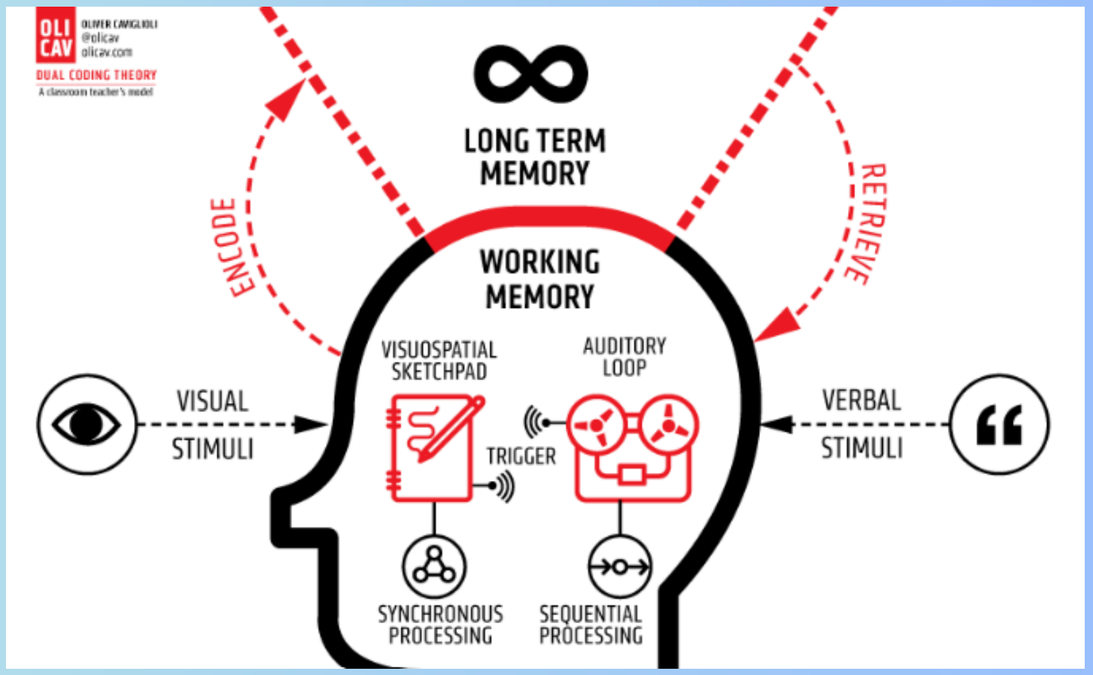
Years 1&2								
Autumn Term 16 weeks	Number Place Value **3 weeks**	Number Addition & Subtraction (within 20) **3 weeks**	Number Place Value (within 100) **2 weeks**	Number Place Value (within 100) **2 weeks**	Geometry Shape **2 weeks**	Number Fractions **3 weeks**		**Flexi week 1 week**
Spring Term 13 weeks	Number Addition and Subtraction (within 100) **(4 weeks)**		Number Multiplication & Division **(2 weeks)**	Number Multiplication & Division **(2 weeks)**	Measurement Length & Height **(2 weeks)**	Measurement Mass, Capacity & Temperature **(2 weeks)**		Statistics **1 week**
Summer Term 9 weeks	Measurement Money **(2 weeks)**	Measurement Time **(2 weeks)**		Measurement Time **(1 week)**	Geometry Position and Direction **(1 week)**	**Ready to Progress Statements Review Need of cohort/key stage?** **(3 weeks)**		

What does a lesson look like?

Richard Hill's Maths
Agreed Lesson Structure

A daily maths lesson must include:

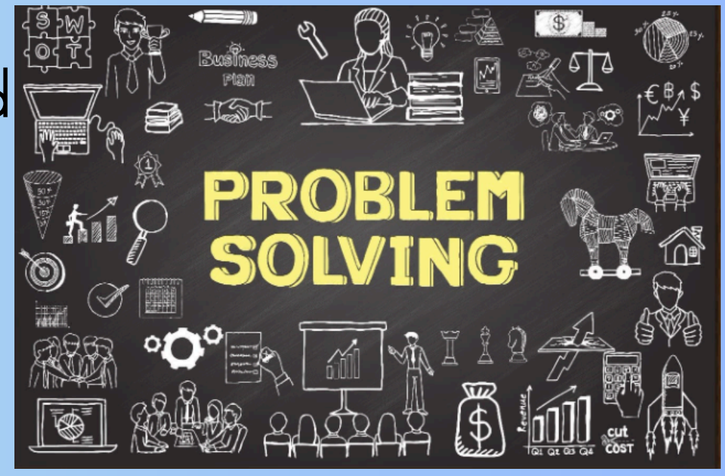
- **Connect** (Flashback 4)
- **Let's unpick together**… (test style question)
- **Connect** – (Review of previous lesson)
- **LI & "A mathematician can" …**
- **Vocabulary**
- **Explain**
- **Example**
- **Attempt**
- **Apply**
- **Challenge**
- **Next steps for learning**



How can you support at home?

Nursery – Learn maths through play and experiences e.g. shopping / tea parties / sharing / counting 1:1
Reception – Continue to learn through play
Subitise to 10 **(don't count, can you see the amount?)**
Number bonds within and up to 10

KS1 (Years 1 and 2) – Continue with **number bonds** within and up to 10
Move onto making connections with bonds to 20 and 100
2, 5, 10, 3 times tables

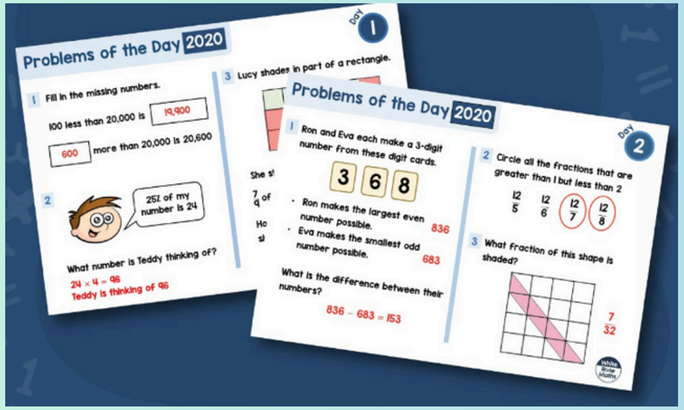


LKS2 (Years 3 and 4) – Continue to apply **number bonds** to addition and subtraction number and word problems
All times tables up to 12x must be learnt through automatic recall by Year 4

UKS2 (Years 5 and 6) – Continue to apply **number bonds** to addition and subtraction number and word problems (including decimals)
Consolidate multiplication facts

Helpful websites...

https://whiteroseeducation.com/resources/maths/problems



https://nrich.maths.org/articles/subitising

UNIVERSITY OF CAMBRIDGE nrich

https://www.topmarks.co.uk/

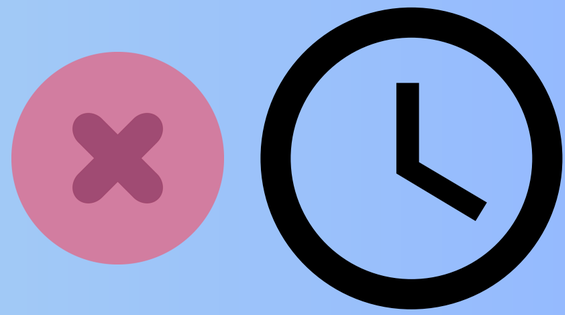
Topmarks

https://ttrockstars.com

TIMES TABLES ROCK STARS

GOV.UK

MTC Test - Year 4



The multiplication tables check (MTC) is statutory for all year 4 pupils registered at state-funded maintained schools, special schools or academies, including free schools, in England.
The purpose of the MTC is to determine whether pupils can recall their times tables fluently, which is essential for future success in mathematics. It will help schools to identify pupils who have not yet mastered their times tables, so that additional support can be provided.
In 2025, schools must administer the MTC to all eligible year 4 pupils between Monday 2nd June and Friday 13th June.

please take the handouts

Parent Guide

GOV.UK

Year 6 SATS

Mrs WH will run a workshop about KS2 SATs

KS2 (Key Stage 2) SATs are compulsory national tests for all Year 6 pupils in England. The tests challenge children's English and Maths skills in comprehension, spelling, problem-solving and more.

Thank you for coming!

Please feel free to come and speak your child's teacher, Mrs McVeigh or Mrs Applebee if you have any further questions about Maths.

Please complete a **feedback form** before you leave. We value your feedback to ensure we continuously supporting our children, parents and community.

If you have a questions about your child specifically, please do ask their teacher for support as this feedback is anonymous.