

# MATHS MASTERY



West Norfolk  
Academies Trust



# THINK OF A NUMBER

- 1) Double it
- 2) Add 10
- 3) Halve it
- 4) Subtract your original number
- 5) Discuss



**YOUR ANSWER**

**5**



# THE NATIONAL CURRICULUM

The expectation of the National Curriculum is that the majority of pupils will move through the programmes of study at broadly the same pace.



# NATIONAL CURRICULUM AIMS

The national curriculum for mathematics aims to ensure that all pupils:

- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Can solve problems by applying their mathematics to a variety of routine and non routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.



# GROWTH MINDSET

“With a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work. Brains and talent are just the starting point.”

- The power of yet – I cannot do it...YET
- Power of praise – praising the effort, not the outcome
- Talking about Maths and asking questions
- Mistakes are valuable – they cause the brain to grow
- Parents’ beliefs about Maths change their children’s achievement
- Depth is more important than speed – understanding is crucial

Further information can be found at [www.youcubed.org](http://www.youcubed.org)



# THE PRINCIPLES OF MASTERY

- Based on the Singapore method of teaching, which has been developed and altered by experts to fit the UK education culture.
- Time given to think deeply about mathematical concepts and gain a real understanding, rather than a reliance on rote learning methods.
- Builds self-confidence in learners.
- Whole class moved through content at the same pace.
- Children are challenged through depth and problem solving.
- Promote number sense.
- Children are taught that there is more than one way to solve a problem.



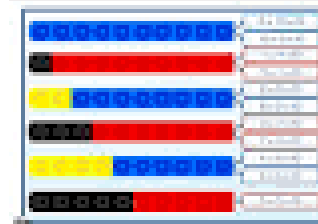
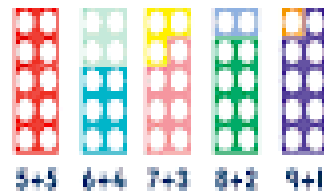
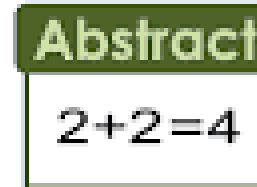
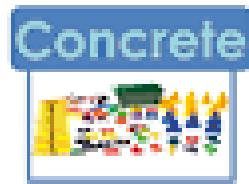
5000 - 2179?

Think about ways to find the difference between:  
5000 - 2179.





# MASTERY IN THE CLASSROOM



$$4 + 6 = 10$$

Two hand icons are shown below the equation, representing the numbers 4 and 6. The first hand has four fingers extended, and the second hand has six fingers extended.

- 10 + 0 = 10
- 9 + 1 = 10
- 8 + 2 = 10
- 7 + 3 = 10
- 6 + 4 = 10
- 5 + 5 = 10
- 4 + 6 = 10
- 3 + 7 = 10
- 2 + 8 = 10
- 1 + 9 = 10
- 0 + 10 = 10





# MASTERY IN THE CLASSROOM

The teacher, or an additional adult, will do further work including pre-teaching with children who require further support to grasp new concepts.



# MASTERY IN THE CLASSROOM

- P1 and P2
- Step for Depth



# MASTERY IN THE CLASSROOM

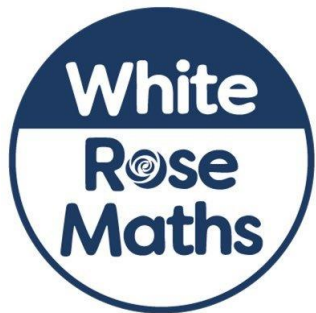
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition and Subtraction		Statistics		Number: Multiplication and Division			Measurement: Perimeter and Area		
Spring	Number: Multiplication and Division		Number: Fractions						Number: Decimals and Percentages		Consolidation	
Summer	Consolidation	Number: Decimals		Geometry: Properties of Shape		Geometry: Position and Direction		Measurement: Converting Units		Measurement: Volume		

The units of work in the curriculum follow those set out by **White Rose Maths**.

Children spend longer on each topic and, as a result, understand the content to a deeper level and supporting teaching for mastery.

Questions visually link to manipulatives, models and images.

This way, pupils' mastery skills are honed to reflect the 3 aims of the national curriculum for mathematics: Fluency, Reasoning and Problem solving.



# MASTERY AT HOME

Home Learning – Class Dojo.

Tackling Tables.

Fluency – number bonds, times tables, addition and subtraction facts etc.

Maths in the real world.



**ClassDojo**

