

Mathematics at Glemsford Primary Academy

KEYSTAGE ONE

The Curriculum

- ▶ Success in mathematics for every child
- ▶ Close the attainment gap

What's new about the Mathematics Mastery approach?

- ▶ None of the individual aspects.
- ▶ Tried and tested approaches
- ▶ Brings together these approaches and techniques
- ▶ Rigorous and systematic structure

Curricular Principles

- ▶ Fewer topics in greater depth
- ▶ Mastery for all pupils
- ▶ Number sense and place value come first
- ▶ Problem solving is central

Key features of our a Maths Mastery curriculum:

- ▶ High expectations for every child
- ▶ Fewer topics, greater depth
- ▶ Number sense and place value come first
- ▶ Research -based curriculum
- ▶ Objects and pictures always before numbers and letters
- ▶ Problem solving is central
- ▶ Calculate with confidence– understand why it works

Mastering mathematical language

Mathematics Mastery lessons provide opportunities for pupils to communicate and develop mathematical language through:

- ▶ Sharing essential vocabulary at the beginning of every lesson and insisting on its use throughout
- ▶ Modelling clear sentence structures using mathematical language
- ▶ Paired language development activities (toolkit lesson)
- ▶ Plenaries which give a further opportunity to assess understanding through pupil explanations

Vocabulary – Multiple Meanings

Cancel Foot Odd

Mean Translate

Power Root Prime

Share Roughly

Take Away Product Volume



What number is half of 6?

6 is half of what number?



What number is half of 6?

6 is half of what number?

What comes next?

- ▶ Thousands
- ▶ Hundreds
- ▶ Tens
- ▶ **Ones!!!!!!**

Why is this important?

Consider:

- ▶ One Hundred = Ten Tens
- ▶ Ten Tens = One Hundred

Similarly:

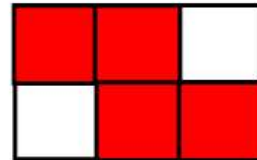
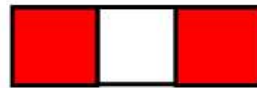
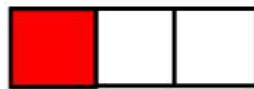
- ▶ One Ten = Ten Ones
- ▶ Ten Ones = One Ten

Fractions – A “Talk Task”

Fraction representation

Which is the odd one out?

Why?



Can you find a way to make each shape the odd one out?

How?



Challenging High Attainers

- ▶ What number is 70 hundreds, 35 tens and 76 ones?
- ▶ Which is bigger, 201 hundreds or 21 thousands?
- ▶ How many bags each containing £10 000 do you need to have £3 billion?
- ▶ How many ways can you find to show/prove your answers?

Number Fact Recall Homework

- ▶ Know their number facts to 2, 3, 4, 5 and 10 by the end of Reception
- ▶ Know their facts to 6, 7, 8, 9, 10 and 20 by the end of Year 1
- ▶ Know their facts to 20, 50 and 100 by the end of Year 2.

Number recall – Section A

Section A BRONZE	3 rd attempt	2 nd attempt	1 st attempt	Fold and check
1 + 9 =				10
2 + 8 =				10
3 + 7 =				10
4 + 6 =				10
5 + 5 =				10
6 + 4 =				10
7 + 3 =				10
8 + 2 =				10
9 + 1 =				10
10 + 0 =				10

Number recall – Section B

Section B	SILVER	3 rd attempt	2 nd attempt	1 st attempt	Fold and check
$3 + ? = 10$					7
$5 + ? = 10$					5
$8 + ? = 10$					2
$1 + ? = 10$					9
$7 + ? = 10$					3
$10 + ? = 10$					0
$6 + ? = 10$					4
$9 + ? = 10$					1
$2 + ? = 10$					8
$4 + ? = 10$					6

Number Fact Recall Homework

- ▶ The practice of times tables starts in Year 2. They need to know their 10x, 2x, 5x and 3x tables by the end of Year 2; their 4x, 6x, 8x and 9x tables by the end of Year 3 and their 7x, 11x and 12x by the end of Year 4. It is essential that all children have a confident understanding of their times tables before they enter Year 6 if they are going to meet the challenges of the revised Year 6 curriculum successfully.