

# Mathematics at Glemsford Primary Academy

KEYSTAGE TWO

# The Curriculum

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

# What's new about the Mastery of Mathematics 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 Mastery of Mathematics 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
- ▶ 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 a quarter of 12?

12 is a quarter of what number?





What number is a quarter of 12?

12 is a quarter of what number?

# What comes next?

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

# Why is this important?

Consider:

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

Similarly:

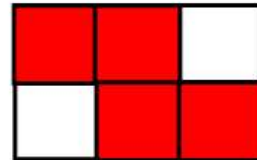
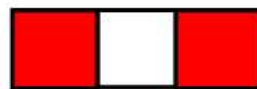
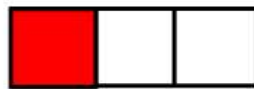
- ▶ One Ten = Ten Ones
- ▶ Ten Ones = One Ten

# 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?

# Times Tables Homework

- ▶ Know their 10x, 2x, 5x and 3x tables by the end of Year 2
- ▶ Know their 4x, 6x, 8x and 9x tables by the end of Year 3
- ▶ Know their 7x, 11x and 12x by the end of Year 4.

# Times Table Facts– Section A

<b>Section A BRONZE</b>	<b>3<sup>rd</sup> attempt</b>	<b>2<sup>nd</sup> attempt</b>	<b>1<sup>st</sup> attempt</b>	<b>Fold and check</b>
<b>0 x 6 =</b>				<b>0</b>
<b>1 x 6 =</b>				<b>6</b>
<b>2 x 6 =</b>				<b>12</b>
<b>3 x 6 =</b>				<b>18</b>
<b>4 x 6 =</b>				<b>24</b>
<b>5 x 6 =</b>				<b>30</b>
<b>6 x 6 =</b>				<b>36</b>
<b>7 x 6 =</b>				<b>42</b>
<b>8 x 6 =</b>				<b>48</b>
<b>9 x 6 =</b>				<b>54</b>
<b>10 x 6 =</b>				<b>60</b>
<b>11 x 6 =</b>				<b>66</b>
<b>12 x 6 =</b>				<b>72</b>

# Times Table Facts – Section B

Section B	SILVER	3 <sup>rd</sup> attempt	2 <sup>nd</sup> attempt	1 <sup>st</sup> attempt	Fold and check
<b>12 x 6 =</b>					<b>72</b>
<b>6 x 6 =</b>					<b>36</b>
<b>6 x 3 =</b>					<b>18</b>
<b>8 x 6 =</b>					<b>48</b>
<b>11 x 6 =</b>					<b>66</b>
<b>6 x 9 =</b>					<b>54</b>
<b>5 x 6 =</b>					<b>30</b>
<b>6 x 2 =</b>					<b>12</b>
<b>7 x 6 =</b>					<b>42</b>
<b>0 x 6 =</b>					<b>0</b>
<b>6 x 1 =</b>					<b>6</b>
<b>10 x 6 =</b>					<b>60</b>
<b>6 x 4 =</b>					<b>24</b>



# Times Table Facts – Section C

Section C	GOLD	3 <sup>rd</sup> attempt	2 <sup>nd</sup> attempt	1 <sup>st</sup> attempt	Fold and check
$0 \div 6 =$					0
$36 \div 6 =$					6
$60 \div 6 =$					10
$66 \div 6 =$					11
$18 \div 6 =$					3
$48 \div 6 =$					8
$12 \div 6 =$					2
$54 \div 6 =$					9
$72 \div 6 =$					12
$42 \div 6 =$					7