

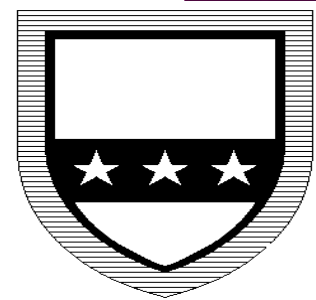
# MATHEMATICS

# WORKSHOP

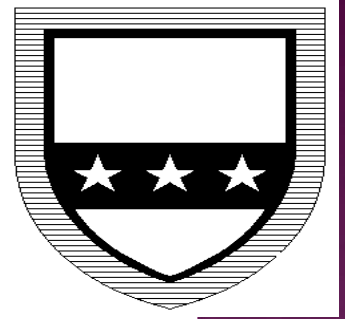
Poulton Lancelyn Primary School

# NATIONAL CURRICULUM CHANGES

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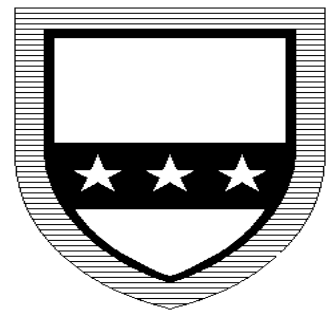


- ◉ New Curriculum introduced from September 2014 for all pupils.
- ◉ Children must be mathematically fluent.
- ◉ Expectations have changed. Coverage and skills have been “pushed down.”
- ◉ Need to know booklets highlight the expectations for each year group.
- ◉ No longer using levels. Emerging, Expected, exceeding.



# SCHOOL CHANGES

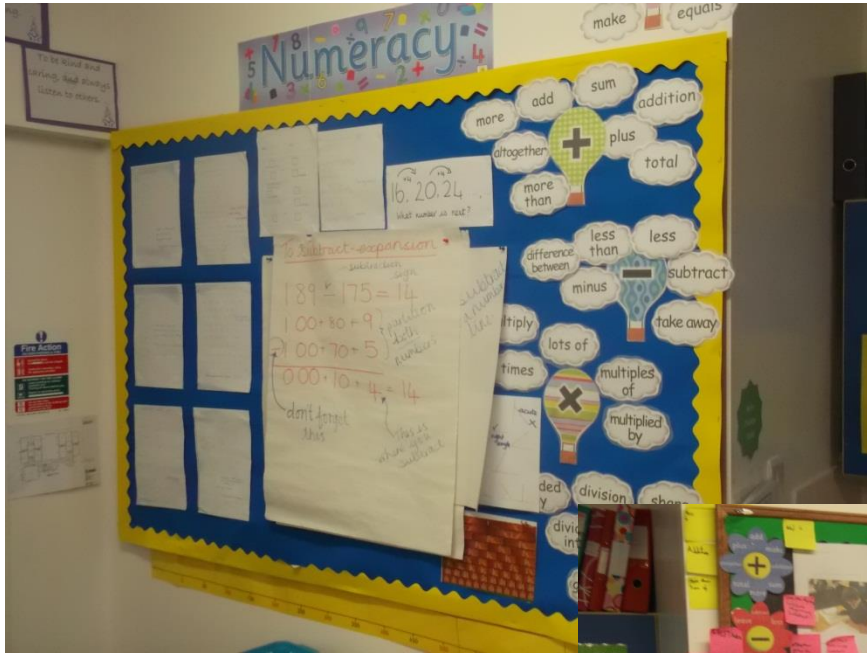
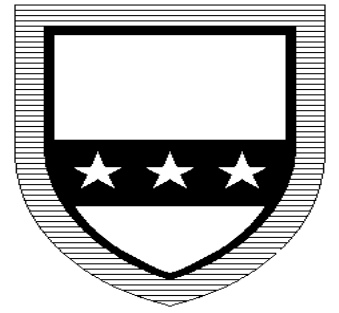
- ◉ Mathematics priority development area. Ofsted 2015
- ◉ Maths calculation policy.
- ◉ Long term plans for each year group.
- ◉ 2 maths lessons per day - main and arithmetic
- ◉ More focus on number to develop number fluency.
- ◉ Intervention support.



# WRITTEN MATHEMATICS

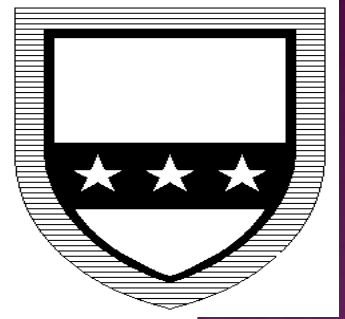
- ◉ Detailed breakdown for each year group in Mathematics policy. On website.
- ◉ Summary document highlights key stages.
- ◉ Mathematics session in each year group will outline the calculation methods used within that group.

# CLASSROOM ENVIRONMENT



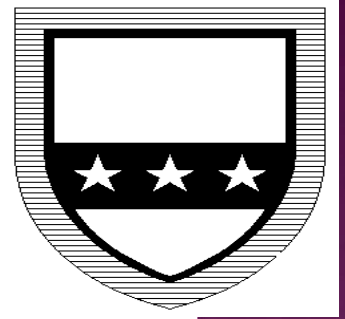
# MENTAL MATHEMATICS

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◉ Extra emphasis on mental mathematics.

- Counting on
- Doubling and adjusting
- Rounding and adjusting
- Partitioning
- Estimation
- Number bonds

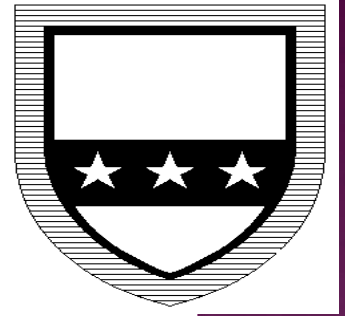


# TIMES TABLES

- ◉ Some aspects tested (motivates some).
- ◉ Can be used as an assessment tool.
- ◉ Ensures pupils know their multiplication and division facts
- ◉ 2019 - new times tables test for Year 4 pupils. Expected to know  $12 \times 12$ .

# HOME HELP

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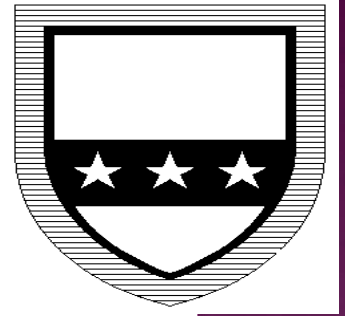


- ◉ Technology (mathletics, apps)
- ◉ Homework
- ◉ Time
- ◉ Shopping
- ◉ **Times tables**
- ◉ Doubling



# IMPORTANCE OF READING

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- ◉ Real life problems involve being able to read.
- ◉ Trend of poor readers = poor mathematicians.

# ADDITION

- Here is how we would solve...

$$707 + 1,818 =$$

1 mark

# ADDITION

- ◉ Sometimes they involve decimals:

$$56.38 + 24.7 =$$



1 mark

# ADDITION

⦿ Now you try...

$$89,994 + 7,643 =$$

☐

1 mark


# SUBTRACTION

⦿ Here's how we would solve...

<div data-bbox="189 505 510 636" style="border: 2px solid blue; width: 166px; height: 92px;"></div>	$= 435 - 30$
<div data-bbox="137 662 1445 1155" style="border: 1px solid red; width: 677px; height: 345px;"></div>	
<div data-bbox="1483 965 1576 1056" style="border: 1px solid black; width: 48px; height: 64px;"></div>	
1 mark	

# SUBTRACTION

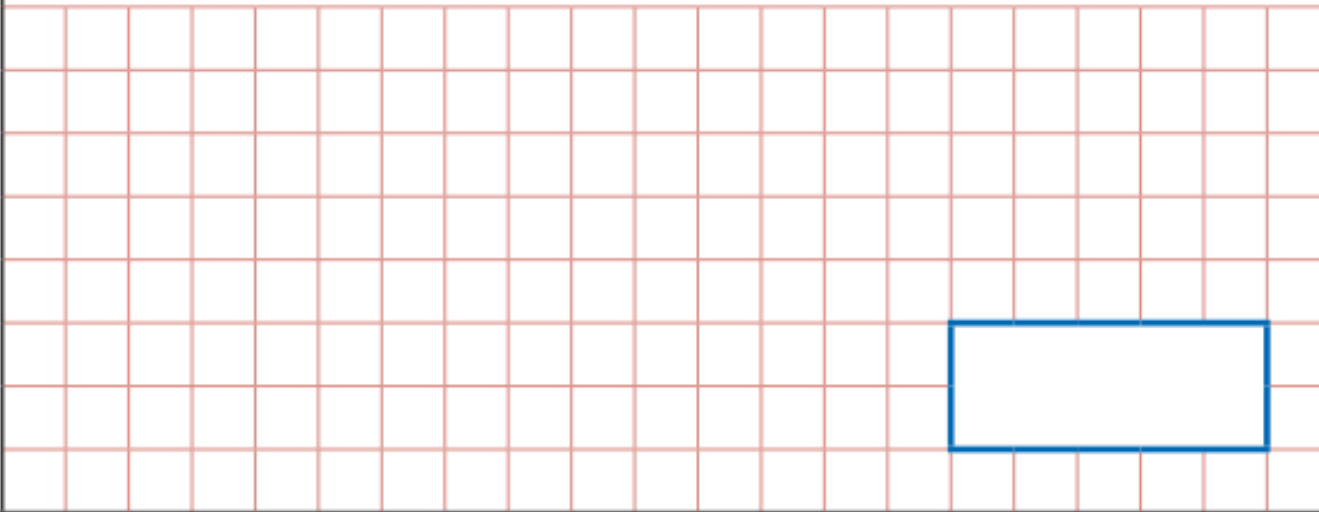
- They may also involve decimals...

$125.48 - 72.3 =$	
	<div data-bbox="1070 996 1387 1125" style="border: 2px solid blue; width: 100px; height: 50px; margin: 10px auto;"></div> <div data-bbox="1483 996 1580 1085" style="border: 1px solid black; width: 40px; height: 40px; margin: 10px auto;"></div> <div data-bbox="1483 1099 1580 1135">1 mark</div>

# SUBTRACTION

⦿ Now you try...

$$122,456 - 11,999 =$$



1 mark

# TIME FOR YOU TO HAVE A GO...


- ◉ On your tables there are a number of addition and subtraction problems
- ◉ You must solve the problems and the answers correlate to a letter on the code sheet.
- ◉ By the end of all the problems from today you will have a number of letters that should spell a mathematical word.



# MULTIPLICATION

◉ Here's how we would solve...

$$8 \times 33 =$$



1 mark

# MULTIPLICATION

- ◉ In year five we also introduce long multiplication...

<b>24</b>	$\begin{array}{r} 418 \\ \times 46 \\ \hline \end{array}$	
Show your method	<div data-bbox="1170 1090 1489 1219" style="border: 2px solid blue; width: 165px; height: 90px; margin: 20px auto;"></div>	<div data-bbox="1586 1086 1682 1176" style="border: 1px solid black; width: 50px; height: 63px; margin: 20px auto;"></div> <p>2 marks</p>

# MULTIPLICATION

⦿ Now you try...

<b>22</b>	$\begin{array}{r} 4781 \\ \times \quad 23 \\ \hline \end{array}$	<div data-bbox="1188 1043 1505 1172" style="border: 2px solid blue; width: 164px; height: 90px; margin: 10px auto;"></div> <div data-bbox="1605 1039 1698 1129" style="border: 1px solid black; width: 48px; height: 63px; margin: 10px auto;"></div> <div data-bbox="1591 1153 1711 1186">2 marks</div>
Show your method		

# DIVISION

- ◉ We use the bus stop method to divide in year five.

$$423 \div 9 =$$

A grid for the bus stop method of division. It consists of a large rectangle divided into a 10x10 grid of smaller squares. To the right of the grid is a vertical grey bar, and to the left is a vertical line. The grid is intended for writing the steps of the division process.

# DIVISION

🎯 Now you try...

$$6015 \div 5 =$$

[illegible]

# TIME FOR YOU TO HAVE A GO...

- ◉ Now it's time for you to answer some multiplication and division problems.
- ◉ Just like earlier, each answer will correspond to a letter to help you guess your code word.
- ◉ Good Luck