Year 3 maths and homework morning

The mastery approach

- As part of our mastery approach, we use different teaching methods within our lesson using concrete, pictoral or abstract representations.

- We start with **concrete** manipulatives in class, such as counters and multi-link, to give children a real world handle on their learning.

- We then move on to **pictorial** representations such as bar modelling, arrays and partitioning and and finally formal methods (**abstract**).

- We aim to expose children to a variety of different methods to allow children to pick one they feel comfortable with.

NC expectations

Place value

Statutory requirements

Pupils should be taught to:

- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving these ideas.

Addition and Subtraction

Statutory requirements

Pupils should be taught to:

- add and subtract numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

## Multiplication and Division

Statutory requirements

Pupils should be taught to:

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Concrete manipulatives

- Concrete manipulatives are any resources that can be physically touched and used to help with mathematical understanding.

- Counters are a good example of this.

- It can be use to help understand place value, adding/subtracting in columns and even understanding fractions to name but a few.
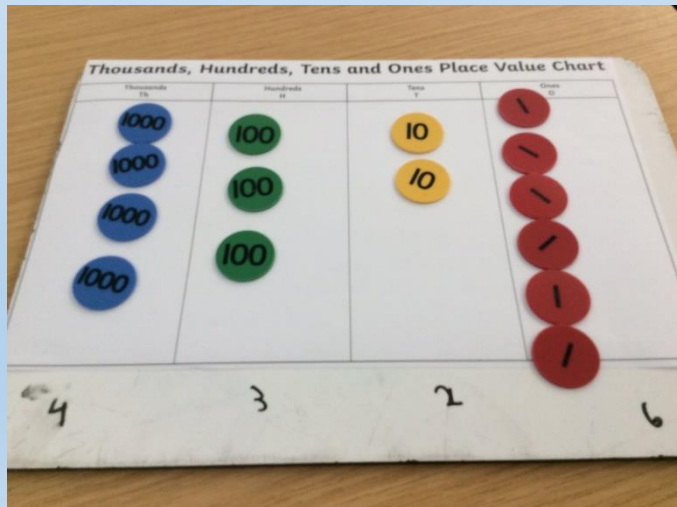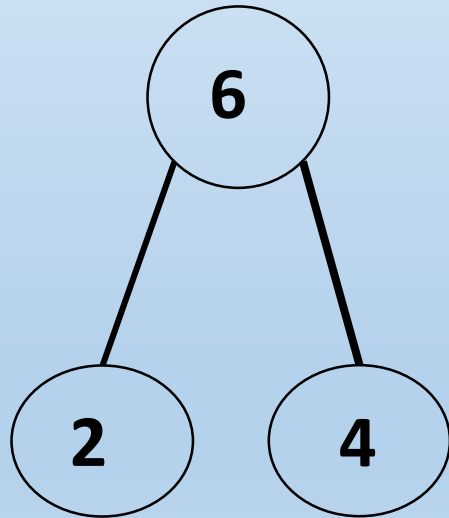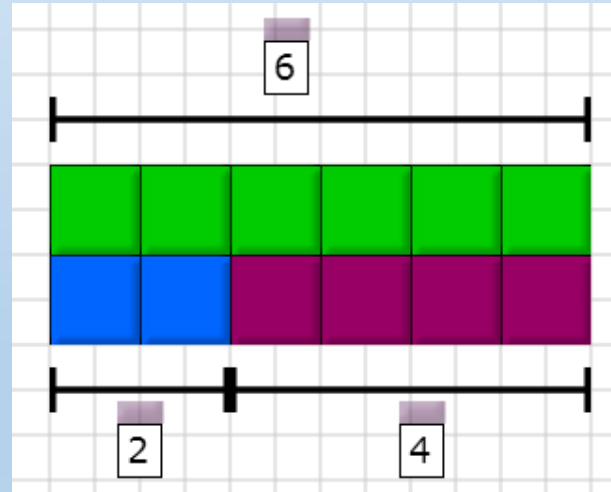
Pictoral Representation

- Pictoral is another way to represent a maths problem. Any diagram or picture can be used to help understand a question and answer it.
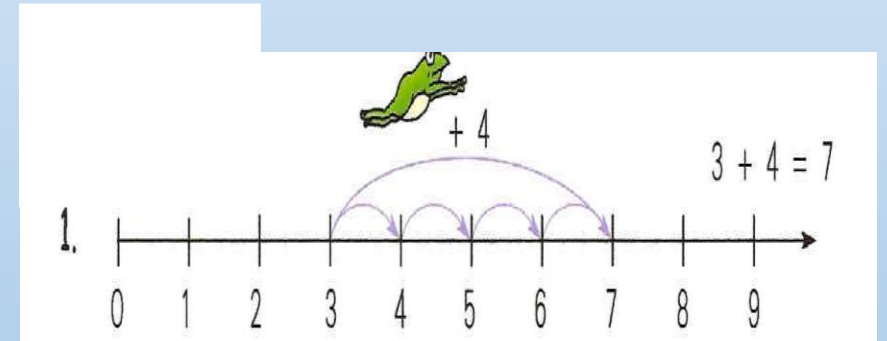
- Here are a few examples:

Partitioning

Bar model

Number lines

Abstract

- Abstract is any mathematical calculations that are either written as a problem or require formal calculation methods

- Here are a few examples:

Formal addition

H	T	O
2	3	6
		8
+		1
2	4	4

Formal subtraction

H	T	O
8	3	1
	2	6
8	0	5

Times Tables Homework

- Timetables are the key to success in almost every area of mathematics.

- It is obviously important when multiplying however it is also vital to have a good grasp of times tables in order to manipulate and calculate fractions, decimals, percentages, ratio, area, volume, angles, conversion of measurements and even algebra!

- At Two Mile Ash times table knowledge is very important!

National Curriculum times tables expectations

By the end of year 2 children are expected to know: 2, 5 and 10

By the end of year 3 children are expected to know: all of the above and the 3, 4 and 8

By the end of year 4 children are expected to know: all multiplication and division facts up to 12 x 12

TT Rockstars is a carefully sequenced online programme of daily times tables practice that Two Mile Ash School has signed up to.

This format has very successfully boosted times tables recall speed for hundreds of thousands of pupils over the last 8 years in over 16,000 schools - both primary and secondary - worldwide.

In Two Mile Ash we have been using the online programme for a number of years to help support the learning of our tables and the related division facts.

All children have been given a username and password for this site and we ask that you encourage them to practise their tables as often as possible.

The programme is a fun and interactive way to improve their knowledge of their times tables and their related division facts as well as their speed and accuracy of recall.

Once signed into the programme, each child is asked to create their "rock name".

The tables they practise can be set by their teacher to make this bespoke to their learning.

There are various different ways to practise their tables:

Let's have a look around the website:

MyMaths Homework

- MyMaths is an interactive online homework website that Two Mile Ash School use to set their weekly homework.

- In Year 3, homework will be set online every Friday and needs to be completed by the following Friday morning.

- The homework that is set each week will link closely to the maths that is taught that week.

MyMaths Homework

- All children have been given a username and password for this site and we ask that you encourage them to complete their homework every week.

- The homework set is marked automatically making it easy for both children and parents to see how well they are doing. It also gives them an overall percentage score.

- The homework can be completed more than once if a child wants to increase their score and we encourage children to do this; particularly if their percentage score is lower than 50%.

- There is also an option to have a mini lesson on the homework subject before they complete the homework. This section can also be helpful to parents as it demonstrates the methods used to answer the questions for that particular homework.

- Once the homework is completed, the class teacher can review it and add a comment for the child which can be seen by you and your child at home.

MyMaths Website

https://www.mymaths.co.uk/