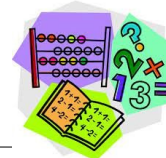




# Maths Masterclass



## Year 6: Spring 2

Alongside the half-termly curriculum information, we will be including additional information about the maths learning that your child will be undertaking over the coming weeks. This includes some of the methods used in school to help you understand how we teach maths and make it easier to support your child with their learning.

### Volume

We will be looking at using formula to find volume this term and also looking at area and perimeter.

**Fantastic Formulas!**

**Perimeter:** measurement of the distance around an object

5 in. 5 in. 5 in. 5 in.

$p = s + s + s + s$   
 $p = 5 + 5 + 5 + 5$   
 $p = 20 \text{ in.}$

**Area:** measurement of 2D space inside an object

3 units 2 units

$a = l \times w$   
 $a = 3 \times 2$   
 $a = 6 \text{ units}^2$

**Volume:** measurement of 3D space inside an object

3 meters 2 meters 1 meters

$v = l \times w \times h$   
 $v = 3 \times 2 \times 4$   
 $v = 24 \text{ meters}^3$

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### Measures

We will be recapping converting of measures this term. Children undertake a weekly challenge on converting measures as part of their arithmetic. Ensuring your child is confident in multiplying and dividing by 10, 100 and 1000 will help with this.

We will also look at converting between miles and kilometres.

Facts to remember:

1 mile = 1.6km

5 miles = 8km

### Number and Place Value— Factors, multiples and prime numbers

This term children will be looking at factors, multiples and prime numbers. They will be looking at common factors and common multiples and investigating patterns with these numbers. This is a good chance to ensure your child is secure in their times tables. Remind them of TTRS which they can use to improve their fluency. A good understanding of their times tables will be very beneficial to the children particularly in their arithmetic and fraction work.

### Algebra

Following our work on formulae, children will be :

- looking at express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns

$$B + C = 12$$

Can you find two numbers that

B	C
1	11
2	10
3	9
4	8
5	7

Add together to make 12?

We could use a table to start listing some

Children will be set weekly homework from their Maths homework books this term. These are 10minute assessments which we will go through together in school. We will also be providing a SATS club during one lunch time a week and once a week after school. Please remind children there is also MyMaths for them to complete if they wish and TTRS if they need/wish to develop their fluency.



# Maths at Home

## Fractions

We will be revisiting fractions. We will looking at using the four operations with fractions as well as recapping how to convert between fractions, decimals and percentages.

### Addition

$\frac{1}{4} + \frac{3}{8} =$

If the denominators are different, first find a common denominator.

$[\frac{1}{4} \times \frac{2}{2}] + \frac{3}{8} =$

$\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$

Then add or subtract the numerators.

The denominators stay the same.

### Subtraction

$\frac{5}{6} - \frac{3}{4} =$

$[\frac{5}{6} \times \frac{2}{2}] - [\frac{3}{4} \times \frac{3}{3}] =$

$\frac{10}{12} - \frac{9}{12} = \frac{1}{12}$

### Multiplication

Multiply the numerators.

$\frac{3}{4} \times \frac{4}{5} = \frac{12}{20} = \frac{3}{5}$

Multiply the denominators.

Reduce.

**Remember to Reduce!**

### Division

First, invert the divisor.

$\frac{4}{5} \div \frac{5}{6} =$

Multiply the numerators.

$\frac{4}{5} \times \frac{6}{5} = \frac{24}{25}$

Multiply the denominators.

Changing Fractions, Decimals and Percentages Examples

Decimal	Percentage	Fraction
0.23	23%	$\frac{23}{100}$ cannot simplify!
0.05	5%	$\frac{5}{100} \rightarrow \frac{1}{20}$ can simplify!

Percentage	Decimal	Fraction
7%	0.07	$\frac{7}{100}$ cannot simplify!
12%	0.12	$\frac{12}{100} \rightarrow \frac{3}{25}$ can simplify!

## Formula

Children will be using simple formulae and be generating and describing linear number sequences.

## Sequences

- There are two rules we can find for every sequence.
  - A step rule - tells us how to find the next number.
  - A general rule - tells us how to find any number.
- For example...

Term →	1	2	3	4	5	6	7	8	9
Number →	3	6	9	12	15	18	21	24	27

## Finding The Nth Term

5 8 11 14 17...

+3 +3 +3 +3

This number goes here **3** n +

5 8 11 14 17...

+3

The difference between these numbers goes here

**3** n + **2**