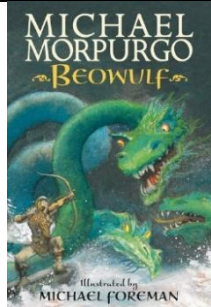




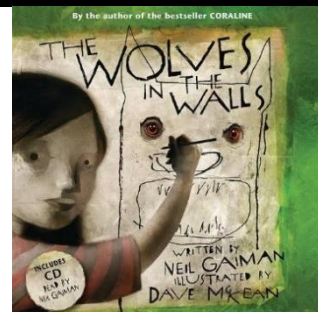
Year 5

Autumn Term

Reading stimulus



This term we will be reading 'The Wolves in the Walls' by Nick Gaiman and 'Beowulf' by Michael Morpurgo which will inspire our writing genres: stories with issues/dilemmas; non-chronological reports; instruction texts; information texts; stories with a historical setting; newspaper reports and poetry. In reading, developing fluency and pace will be a continued focus.



Maths

In Mathematics we will be developing knowledge and skills in 'Number and Place Value' by reading, writing, ordering, comparing and rounding numbers up to 1,000,000; recognising Roman numerals to 1000 and year dates written in Roman numerals. In 'Addition and Subtraction' written and mental methods will be the focus and in 'Multiplication and Division' identifying multiples, factors, prime and composite numbers, square numbers and cube numbers and multiplying and dividing by 10, 100 and 1000 will be the objectives. In 'Fractions', we will be calculating fractions of quantities and amounts, equivalent fractions, converting improper fractions and mixed numbers, comparing and ordering fractions as well as adding and subtracting fractions including mixed numbers. The Year 5 mathematical objectives are attached to the end of this newsletter.

**Please encourage your child to continue to secure all multiplication knowledge as well as the associated division facts e.g.  $12 \times 8 = 96$  therefore  $96 \div 12 = 8$  along with the use of TTRockstars as this supports much of the Maths learning in Years 5 and 6.**

Science

In studying 'Earth and Space', we will be describing the movement of the Earth, other planets and the Moon in the solar system as well as explaining the occurrence of day and night and the seasons. In our 'Forces' unit, we will explore and investigate the effects of gravity, friction, air and water resistance on objects and how mechanisms allow a smaller force to have a greater effect.

Geography / History

In Geography, children will be developing their locational knowledge with a focus on the local area as well as regions of the UK. In our unit 'Changes in Our Local Environment'. We will explore how these areas have changed over time. In History, this term, we will be finding out about the chronology, key features, and changes from the start of the Anglo-Saxon period through to the Norman Invasion in 1066 and considering evidence to answer the question 'Was the Anglo-Saxon period really was a 'Dark Age?'

R.E.

In RE we will be thinking about the questions 'What can we learn from religions about temptation?' and 'What does it mean if Christians believe God is holy and loving?'

Art

In Art, our focus will be drawing in the unit 'I need Space'.

Design Technology

In Design Technology, our focus will be on frame structures. Pupils will evaluate existing products and design, make, and evaluate their own frame structure for a chosen purpose and user. We will explore, through focused practical tasks, ways of strengthening frame structures.

Computing

This term, Year 5 will begin by considering aspects of E-safety and how the networking system of the Internet works. Following this, we will be developing knowledge and skills in our Creating media unit to edit videos.

Music

In our Music lessons, based on the theme of Ancient Egypt, we will learn to identify the pitch and rhythm of written notes and experiment with notating our compositions, developing an understanding of staff notation. In our second unit, we will explore this further by composing and performing our own musical composition to represent Holi, the Hindu festival of colour.

## P.E.

Our PE sessions for this term are on **Thursday** afternoon. We will be working on developing gymnastic skills. **Please can you ensure that all earrings and jewellery are removed for this session for safety.**

## Jigsaw

The whole-school value for this term in Co-operation.

Our Jigsaw sessions will look at 'Being Me' where we focus on personal goals and in the second half-term, the focus will be on 'Celebrating Differences'.

## MFL

In developing our speaking, reading, and writing in French, we will be reviewing basic conversational phrases and developing vocabulary to say more about how we are feeling and why; learning new vocabulary relating to the school timetable so that we can communicate ideas about subjects that we like; and learning words and phrases to talk about places in the town and shopping.

## Homework

### Reading

All children have a reading book which can be taken home. Please encourage your child to read, and change their book, regularly to develop reading fluency, word meaning and comprehension skills. Reading books can be changed in school on any day of the week. Remember to bring these books into school daily as there will be opportunities for independent reading during the school day.

### Maths

Regular short bursts on TTRockstars will support your child's fluency and speed in recalling multiplication facts. Times tables will be set for each pupil based on the baseline assessment completed at the start of this term.

We follow the medium term White Rose plan in lessons. If you wish to support the in-lesson learning, the following link provides daily video clips related to the learning methods.

<https://whiteroseeducation.com/parent-pupil-resources/maths/home-learning?year=year-5-new>

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Number Place value VIEW	Number Addition and subtraction VIEW	Number Multiplication and division VIEW	Number Fractions A VIEW								
Spring term	Number Multiplication and division B VIEW	Number Fractions B VIEW	Number Decimals and percentages VIEW	Measurement Perimeter and area VIEW	Statistics VIEW							

### Cross-curricular work/projects

The focus for learning in each subject is outlined in this newsletter. We would like the children to consolidate and extend their learning by researching and presenting information or by producing creative pieces of work linked to these areas. We are always keen to share these with others and to display pupils' work in our classroom to celebrate their effort and hard work. Examples might include:

Information posters  
mobiles  
puzzles/games

artwork  
fact files  
homework help

models  
leaflets/booklets  
webpages

historical artefacts  
poems  
Powerpoint slide shows



# Maths Overview Year 5 – Moorlands Primary School



## Number: Number & Place Value

- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- solve number problems and practical problems that involve all of the above
- read Roman numerals to 1000 (M) and recognise years written in Roman numerals

## Number: Multiplication & Division

- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- establish whether a number up to 100 is prime and recall prime numbers up to 19
- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- multiply and divide numbers mentally drawing upon known facts
- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
- solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates

## Measurement

- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes
- estimate volume [for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]
- solve problems involving converting between units of time
- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling

## Number: Addition & Subtraction

- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- add and subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

## Number: Fractions

- compare and order fractions whose denominators are all multiples of the same number
- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements  $> 1$  as a mixed number [for example,  $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$ ]
- add and subtract fractions with the same denominator and denominators that are multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- read and write decimal numbers as fractions [for example,  $0.71 = 71/100$ ]
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- round decimals with two decimal places to the nearest whole number and to one decimal place
- read, write, order and compare numbers with up to three decimal places
- solve problems involving number up to three decimal places
- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- solve problems which require knowing percentage and decimal equivalents of  $1/2$ ,  $1/4$ ,  $1/5$ ,  $2/5$ ,  $4/5$ , and those fractions with a denominator of a multiple of 10 or 25

## Geometry: Properties of Shapes

- identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- use the properties of rectangles to deduce related facts and find missing lengths and angles
- distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
- draw given angles, and measure them in degrees (°)
- identify angles at a point and one whole turn (total 360°)
- identify angles at a point on a straight line and half a turn (total 180°)
- identify other multiples of 90°

## Geometry: Position & Direction

- identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed

## Statistics

- solve comparison, sum and difference problems using information presented in a line graph
- complete, read and interpret information in tables, including timetables