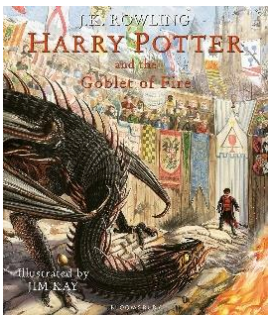
Moorlands Primary School – Curriculum Newsletter

Year 6	Autumn Term

English



Within Reading and Writing lessons, we shall be focussing on 'Harry Potter and the Goblet of Fire' by J.K. Rowling, a special edition illustrated by Jim Kay. This book will complement our Reading and Writing curriculum objectives throughout this term. This will inspire writing, including descriptions, recounts, persuasive letters and diary entries. In addition, we will be using the book to inspire our own narratives.
Reading skills will be developed through 'Reading Owl' sessions which will allow in depth thorough discussions of higher level texts, word meaning (including synonyms and antonyms), retrieving information from texts, making inferences and making predictions based on the text.

Maths

In Maths, we will be continuing to develop skills across a range of mathematical areas. Across the autumn term, we will focus heavily on our number skills. We will recap key place value knowledge, including looking at numbers to 10,000,000 and rounding. We will also practise all calculation skills and formal methods, as well as learn about types of numbers, such as prime numbers and multiples. Finally, we have a lengthy focus on fractions as we learn about a range of ways fractions can be used and applied in Maths. We will have a strong emphasis on reasoning in Maths allowing the pupils to apply their mathematical knowledge to varying real life and problem solving situations. The Year 6 mathematical objectives are attached to the end of this newsletter.
Please encourage your child to secure all multiplication knowledge as well as the associated division facts e.g. 12x8 = 96 therefore 96÷12=8.

Science

In Science, we will be covering the unit 'Light', exploring the way that light behaves, including light sources, reflection and shadows. We will also cover the unit 'Electricity' focusing on components of a circuit, investigating voltage and give reasons for how components function. Throughout sessions, we will also be developing our prediction, investigation and evaluation skills.

Geography / History

Historically, we will be developing our understanding of World War II and the effect that this has had on our lives today. We will delve into the events of World War II, including a historical timeline, evacuation, 'The Blackout', 'The Blitz', evacuation, refugees and rationing to understand why World War II happened.
Geographically, we will be exploring the countries which were involved in WW2 – Allied forces, Axis forces and the neutrals. We will also be looking at the places that children were evacuated from and to.

R.E.

For this term, we will be investigating the religion of Hinduism. We will consider the beliefs of Hindus and how they live, individually and in communities.

Art/DT

In Art, our focus will be a craft and design unit 'Photo Opportunity'. We will explore creative photographic techniques, creating new images through photomontage, understanding photorealistic self-portraits, and applying digital photography to art design, enhancing their skills in composition and editing.

P.E.

Children will be taking part in swimming on Tuesdays. ***Please can you ensure that children have their swimming. kit and all earrings and jewellery are removed for this session.***

Computing

This term Year 6 will be developing their understanding of how the World Wide Web operates, including search engines. Following this, we will be designing 3d models using computer software. E-safety elements will be considered throughout the whole curriculum. Within school, some lessons use a blended learning approach which uses Google Classroom and online learning in conjunction with non-technological methods.

Jigsaw

Children will be considering who they are and their values and contributions within our world. Our Jigsaw sessions will look at different relationships and emotions.

The whole-school value for this term is co-operation.

MFL

During French, the children will be exploring their feelings, practicing phrases to develop a conversation and aiming to write a paragraph about themselves.

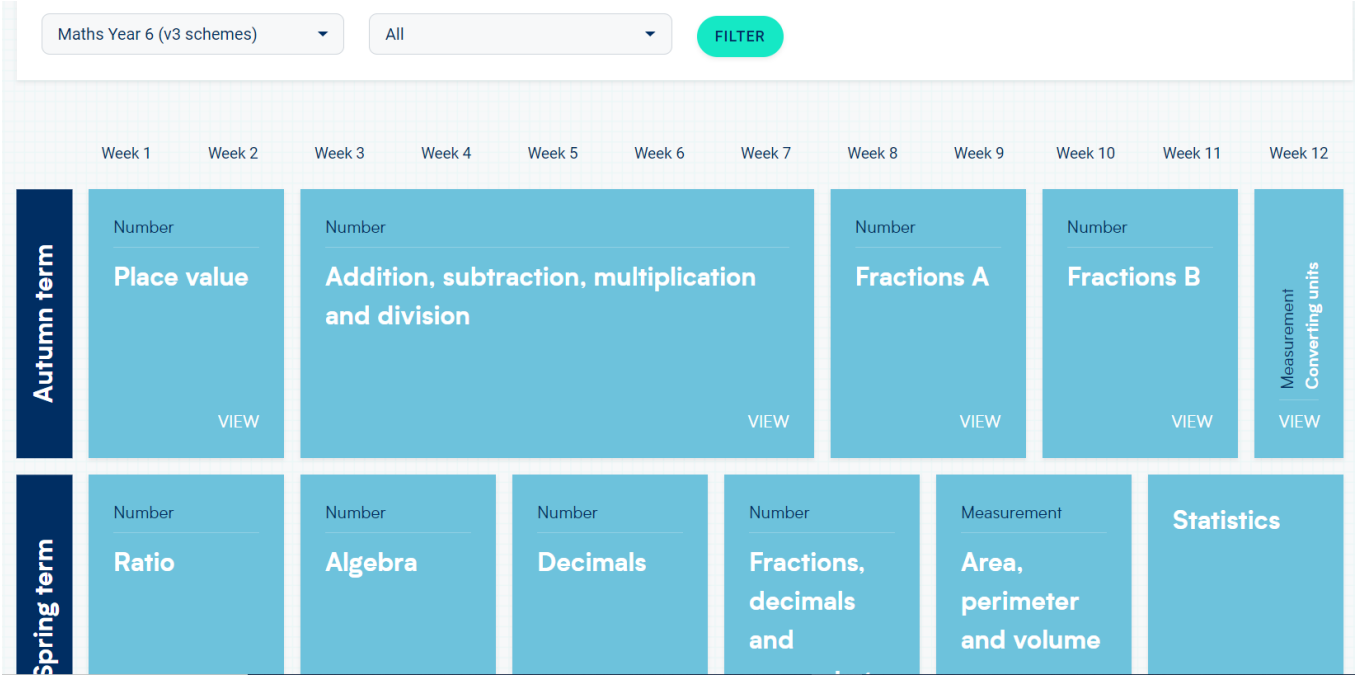
Homework

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-6-new



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	artwork	models	historical artefacts
mobiles	fact files	leaflets/booklets	poems
puzzles/games	homework help webpages		Powerpoint slide shows

Maths Overview Year 6 – Moorlands Primary School

Number: Number & Place Value
- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems that involve all of the above.

Number: Multiplication & Division
- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- identify common factors, common multiples and prime numbers
- perform mental calculations, including with mixed operations and large numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Measurement
- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

Ratio & Proportion
- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Number: Addition & Subtraction
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- perform mental calculations, including with mixed operations and large numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Number: Fractions
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 x 1/2 = 1/8]
- divide proper fractions by whole numbers [for example, 1/3 of 2 = 1/6]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Geometry: Properties of Shapes
- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry : Position & Direction
- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Statistics
- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

Algebra
- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables.