## Year 5

## Reading

By the end of the year, Year 5 need to know:

#### Word Reading:

 Apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology), both to read aloud and to understand the meaning of new words they meet.

#### Reading comprehension:

- maintain positive attitudes to reading and an understanding of what they read by:
- continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks.
- reading books that are structured in different ways and reading for a range of purposes.
- increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions.
- recommending books that they have read to their peers, giving reasons for their choices.
- identifying and discussing themes and conventions in and across a wide range of writing
- making comparisons within and across books
- learning a wider range of poetry by heart
- preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience.
- understand what they read by:

## Meet the team!





Mr Brown, Class Teacher. Mrs Sangha, Class Teacher.

## Maths

#### Number and Place value.

Pupils should be taught to:

- 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.

#### Addition and Subtraction.

Pupils should be taught to:

- 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.

#### Multiplication and Division.

- checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context.
- asking questions to improve their understanding.
- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.
- predicting what might happen from details stated and implied.
- summarising the main ideas drawn from more than I paragraph, identifying key details that support the main ideas.
- identifying how language, structure and presentation contribute to meaning.
- discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.
- distinguish between statements of fact and opinion.
- retrieve, record and present information from nonfiction.
- participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously.
- explain and discuss their understanding of what they
  have read, including through formal presentations and
  debates, maintaining a focus on the topic and using
  notes where necessary.
- provide reasoned justifications for their views.

## Writing

## The texts we will use as inspiration are:



The Jungle book by Rudyard Kipling







Francis – The literacy shed (Video Stimulus)

The Great Kapok Tree by Lynne Cherry

## We will use them to write:

- Narratives with issues and dilemmas, Myths and Legends, suspense and from different viewpoints
- Recounts including diary entries and newspaper reports
- Biographies/Autobiographies
- Poetry
- Information/Explanation texts
- Balanced arguments

#### The Grammar and punctuation we will learn is:

- Converting nouns or adjectives into verbs using suffixes
- Verb prefixes.
- Relative clauses.
- Indicating degrees of possibility using modal verbs to adverbs.
- Devices to build cohesion within a paragraph.
- Linking ideas across paragraphs using adverbials of time, place and number.

- identify multiples and factors, including finding all factor pairs of a number, and common factors of two number.
- know and use the vocabulary of prime numbers, prime factors and composite (nonprime) 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  $\binom{2}{2}$  and cubed  $\binom{3}{2}$
- 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.

#### 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.

## Reading for pleasure

## Books we will en joy reading together:



## Music

## During year 5, pupils will:

- to sing and play musically with increasing confidence and control.
- develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.
- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression.

- Brackets, dashes or commas to indicate parenthesis
- Use of commas to clarify meaning or avoid ambiguity

#### Science

## During Year 5, pupils will study:

### Earth and space:

In this topic we will learn all about the movement of the Earth and other planets in relation to the sun and discover what really lies beyond our own planet!

#### Forces:

As part of our forces topic we will learn about gravity and its effect on Earth as well as experimenting with mechanisms, levers, pulleys and gears.

### Living things and their habitats:

We will explore the differences in the lifecycles of mammals, amphibians, insects and birds. We will learn about the process of reproduction in some plants and animals.

### Animals including humans:

We will develop our understanding of how the human body changes and adapts as it grows from baby to old age.

#### Properties and changes of materials:

In this topic we will explore everyday materials, sorting and evaluating them on their properties. We will use our prior knowledge of solids, liquids and gases to explain changes in the materials we use.

- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > I as a mixed number.
- 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.
- 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  $\Box$ ,  $\Box$ , 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

#### Measurement

- convert between different units of metric measure.
- 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

- improvise and compose music for a range of purposes using the inter-related dimensions of music.
- listen with attention to detail and recall sounds with increasing aural memory.
- use and understand staff and other musical notations.
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians.
- develop an understanding of the history of music.

## Instruments we learn to play:

Glockenspiel





Recorder

## Physical Education

### During Year 5, pupils will:

- Use running, jumping, throwing and catching in isolation and in combination.
- Play competitive games, modified where appropriate, and apply basic principles suitable for attacking and defending.
- Develop flexibility, strength, technique, control and balance.
- · Perform dances using a range of movement patterns.
- Take part in outdoor and adventurous activity challenges both individually and within a team.
- Compare their performances with previous ones and demonstrate improvement to achieve their personal best

#### By the end of Primary school, pupils will be taught to:

- swim competently, confidently and proficiently over a distance of at least 25 metres.
- use a range of strokes effectively.
- perform safe self-rescue in different water-based situations.

#### Some of the sports we take part in will include:

- Gymnastics,
- Movement,
- Fitness,
- Dodgeball,
- Football
- Tennis,

- centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes.
- estimate volume [for example, using I cm3 blocks to build cuboids (including cubes)] and capacity.
- solve problems involving converting between units of time.
- use all four operations to solve problems involving measure using decimal notation, including scaling.

### Geometry - properties of shape

Pupils should be taught to:

- identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
- draw given angles, and measure them in degrees (o).
- identify:

-angles at a point and one whole turn (total 3600).
-angles at a point on a straight line and 2 I a turn (total 1800)
-other multiples of 900.

- 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.

#### Geometry - position and direction

Pupils should be taught to:

• 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.

## Personal, Social, Health Education

## Modern Foreign Languages — French

## Religious Education

## During Year 5, pupils will study:

### Being me in my world.

In this topic we will learn about the importance of working together as a team and how our own actions can make a difference to our class team.

## Celebrating Difference.

In this topic, we will reflect on what bullying is and the difference between direct and indirect types of bullying. We will learn some ways to encourage others to make the right choices and where to get help and support.

#### Dreams and Goals.

In dreams and goals, we will explore how dreams and goals may differ between young people of differing cultures and reflect on how these relate to my own.

## Healthy Me.

In the 'Healthy me' topic, we will find out the different role's food can play in people's lives and explain how people can develop unhealthy relationships with food relating to image pressures.

### Relationships.

In our relationship's topic, we will be able to explain how to stay safe when using technology to communicate with our friends. We will learn how to recognise and resist pressures to use technology in ways that may be risky or cause harm.

### Changing Me.

In our 'changing me' topic, we will learn about how boys' and girls' bodies change during puberty and how we feel about these changes.

## During year 5, pupils will:

 listen attentively to spoken language and show understanding by joining in and responding.



- explore the patterns and sounds
   of language through songs and rhymes
   and link the spelling, sound and meaning of words.
- engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help.
- speak in sentences, using familiar vocabulary, phrases and basic language structures.
- develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases.
- present ideas and information orally to a range of audiences
- read carefully and show understanding of words, phrases and simple writing.
- appreciate stories, songs, poems and rhymes in the language.
- broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary.
- write phrases from memory, and adapt these to create new sentences, to express ideas clearly.
- describe people, places, things and actions orally and in writing Languages — key stage 2.
- understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.

During Year 5, pupils will study:

- Why do some people think God exists?
- What would Jesus do?
- If God is everywhere, why go to a place of worship?
- What does it mean to be a Sikh in Britain?
- What does it mean to be a Muslim in Britain today?
- Through these key questions, pupils will learn what the religions they study believe, items that are special to them and develop an understanding of key stories in the religion.
   They will learn about some of the celebrations that believers take part in and the meaning behind them.

Topic		
Globetrotters.	To infinity and beyond!	Castle Attack!
During this topic, we will study two global destinations within the EU — Romania and France!	During this topic, we will learn all about the sky above us venturing through the clouds and into space!	During this topic, we will explore castles and ways to kee our castle walls free from invaders!
within the EU — Romania and France!  In history we will learn about settlement within the distorical periods of the Anglo Saxons and Scots. We will develop our knowledge of why the Romans left Britain and delve into the art and culture of the Anglo Saxon period.  In geography we will explore the two countries in depth, esearching the climate, temperature, population and dentify where they are located in relation to other ountries we know.  In art we will delve into Le Louvre and enjoy the artwork on display. We will research an artist that inspires us and reate our own artwork based on the images we find.	venturing through the clouds and into space!  In history we will venture into space using virtual reality, learn all about the historical past of space exploration and complete a project learning all about Tim Peake.  In geography we will explore rivers, learning about how they are formed, building and labelling models to show our understanding and conducting investigations that teach us how the water cycle works.  In art we will study artist, Vincent Van Gough, analysing his most famous works. We will further develop our skills using a range of materials and techniques, putting all of these together to create a class version of 'Starry night'.	our castle walls free from invaders!  In history we will investigate the castles of Great Britain, understanding when they were built and who they protected. We will expand our knowledge of Medieval times and the gruesome crimes and punishments that tool place.  In geography we will travel all around the world to develo our understanding of the hemispheres, longitude and latitude. We'll investigate from the North Pole to the South Pole and everything in between!  In art we will study Andy Warhol's famous 'Campbell's soup' and 'Marylin Monroe'. We'll learn the skill of screen
These will then be hung in our very own Stanton Bridge Art gallery for our friends and family to see.  In DT we will become chefs, researching and tasting foods from both France and Romania before designing and ooking our own menu to be served in our 'pop-up estaurant'.  In computing we will further develop our coding and debugging skills by programming one of our robots! The obot will become the waiter for our restaurant, welcoming uests, reading them the menu and also providing some ancing entertainment between courses!	In DT we will learn about electrical systems and how to make them. We will use this knowledge to build and power models of moon buggies.  In computing we develop our skills by designing, making and programming a space game using scratch. We will also use the information we have learnt to create video all about space to premier on our school You Tube channel.	printing to design our own castle artwork.  In DT we will prepare to defend Stanton Bridge from an invasions or attacks! We will design and build trebuchet's further developing our knowledge of levers and putting of woodwork skills to use.  In computing we explore Computer Aided Design, learning and practising our design skills using google sketch-up. We'll then use this online design tool to design our trebuchet's before building them.

# Things to look forward to!

Cook food for our 'Pop up restaurant'



Build a trebuchet



Create river models!



Virtual Reality trip to space!



A trip to the space centre!



Programming the robots!

