GORING CHURCH OF ENGLAND (AIDED) PRIMARY SCHOOL
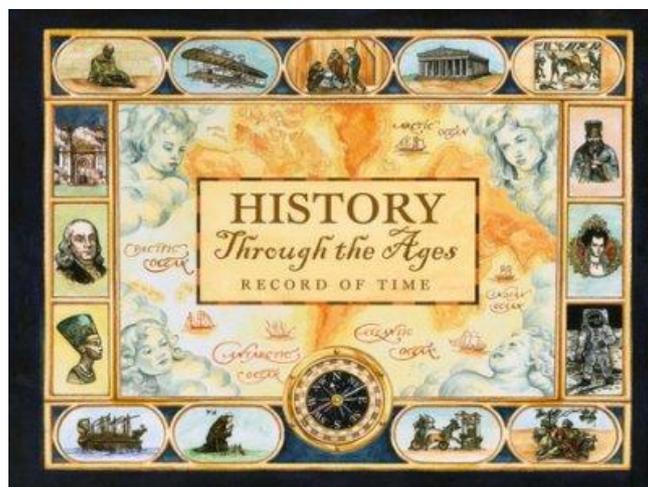
YEAR 6

CURRICULUM INFORMATION

Spring Term

TOPIC:

HISTORY THROUGH THE AGES

Mathematics

We will be covering the following:

- 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 0
- multiply 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
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the 4 operations (BODMAS)
- 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, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
- divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]
- identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
- multiply one-digit numbers with up to 2 decimal places by whole numbers
- use written division methods in cases where the answer has up to 2 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
- solve problems involving the relative sizes of 2 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
- use simple formulae, generate and describe linear number sequences and express missing number problems algebraically
- find pairs of numbers that satisfy an equation with 2 unknowns
- enumerate possibilities of combinations of 2 variables

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 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 3 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]
- 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
- describe positions on the full coordinate grid (all 4 quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes
- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average

Writing

We will be reading a range of fiction, non-fiction and poetry texts linked to the topic. Our writing will include:

- analysing similarities and differences to inform their opinion
- first person recounts and diaries
- formal persuasive letters
- independent information project linked to history
- summarising and predicting their reading
- describing characters and setting
- instructional writing
- analysing how characters change over the course of a novel and the key turning points in the plot
- explore classic poetry, recite using text mapping and write in the style of W.H. Auden
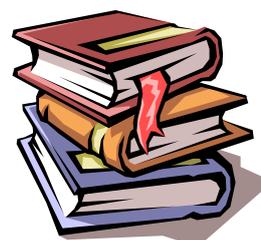
Spelling, punctuation and grammar

We will working on spelling patterns and lists set out within the National Curriculum framework, including:

- Prefixes and suffixes
- Homophones
- Noun phrases and fronted adverbials
- Expanding sentences with more than one clause using a range of conjunctions
- Passive and active voice
- Full range of punctuation including colons and semi-colons

Handwriting

By now, we expect all children in Year 6 to be writing fluently using joined handwriting, unless told otherwise. High quality presentation is expected for all pieces of work, unless otherwise directed for planning/ jottings etc.

Science

We will be learning about light and electricity:

- Explain how light travels and how shadows are formed.
- Investigate how the human eye sees objects.
- Explore different ways to test an idea and choose the best way, and give reasons.
- To vary one factor whilst keeping the others the same in an experiment and present findings through writing, scientific diagrams and graphs.
- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Use recognised symbols when representing a simple circuit in a diagram.

Computing

- We will be using the Purple Mash computer coding software '2Code' to create games on both laptops and iPads.

D.T.

- Researching, designing and making an object which uses electrical components.
- Evaluating their product against their plan to consider whether it has met the design criteria.

History

We will be exploring history through the ages (including crime and punishment) devising historically valid questions about change, cause, similarity and difference, and significance. The children will investigate different sources from the past and research for their own project selecting and organising relevant historical information.

Geography

During the second half term, we will be looking at Russia including its physical resources as well as human geography by comparing urban and rural locations. The climate zones and environmental impact will also be explored.

Art

Year 6 will be studying different artists through the ages and especially focusing on Gustav Klimt and Andy Warhol as pioneers of changes in art during their period of history.

P.E.

Basketball and Football
The children will follow instructions carefully and work with partners communicating effectively. They will develop teamwork skills, roles and responsibilities and decide what approach to use to meet the challenge set. Children will recognise the importance of safety procedures and be able to control shots to achieve desired outcome.

Aerobics
The children will improve their personal scores on performance in aerobics activities.

Benchball
The children will participate in a 'new' sport and play small-sided games. They will think about team game strategies for attacking and defensive play.

R.E.

Children will explore the question – Can religions build a fairer world? We will be looking at how different religions bring about fairness and justice through investigating Judaism, Islam, Shikism and Christianity.

The second half term will be spent exploring the question - What difference does the ressurrection make to Christians? How this is linked to Good Friday and Easter Sunday and how this gives hope for Christians for life with God now, and continuing in a new life in heaven.

Music

Children will:

- Listen and appraise a range of musical styles
- Rehearse (through the use of vocals) popular songs
- Perform in small groups improvising when necessary
- Compose songs that include vocals, tuned and untuned instruments

PSHCE

PSHCE will include work on:

- Getting on and falling out
- Working collaboratively
- Recognising and challenging stereotypes

French

Children will be following a French scheme of work to recap known words and phrases, as well as learning new vocabulary relating to colours, animals and asking questions. The children will be linking their grammar knowledge to the French language to help them construct written sentences in French.

HOW CAN YOU HELP YOUR CHILD?

In preparation for the term, you could help your child search for, or make, books, pictures, artefacts, models about:

- When the police force came into being in the UK and why was it started.
- Research the famous Old Bailey court house in London. When was it built? How many court cases are heard every year there? What famous court cases have been heard there.
- Research Benjamin Franklin, Thomas Edison or Michael Faraday and their scientific discoveries with electricity

At home, during the term you can support your child in the following areas:

English

Reading skills are vital so please ensure that your child reads every day and sometimes to you! It is essential that your child reads a wide range of high quality texts from a variety of genres both fiction and non-fiction, and that you discuss the themes of the texts and their general understanding. We will be setting online comprehension activities to support the children in their learning.

Correct spelling is essential in year 6 so please ensure the children learn the set words as well as use them in context. Please pick up on any high-frequency words that are still being mis-spelt as this will be unacceptable in year 6 e.g. with, they're/their/there, went.

Spelling challenges will be given as regular homework. There will be a list of activities you could choose to do in order to practice these spellings. Please practice these with your child at least 3 times a week.

Mathematics

At home you can:

- Continue to practise times tables up to 12x12 though quick recall and games.
- Practise telling the time in analogue/digital in 12 and 24hr time as well as calculating time intervals.
- Practise converting different units of measure e.g. cm, m, Km / ml, L
- Practise the written methods for all operations especially long multiplication and long division.

Maths homework challenges will be given as regular homework to consolidate children's learning in school as well as online revision of key areas.

We hope this information will be useful but please do not hesitate to get in touch if we can be of any assistance!