

GORING CHURCH OF ENGLAND (AIDED) PRIMARY SCHOOL

**YEAR 6**

**CURRICULUM INFORMATION**

**Autumn Term**

***TOPIC:***

*Extreme Earth*



## 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
- 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<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>]
- 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

**ROB DO YOU HAVE MORE CONSISE MATHS OBJECTIVES IN PARENT SPEAK OR WHAT WE WILL BE DOING IN AUTUMN TERM FROM YOU PREVIOUS PLANNING?**

## Writing

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

- setting descriptions
- 1<sup>st</sup> person recounts and diaries
- decision stories
- information texts



## Spelling, punctuation and grammar

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

- Prefixes and suffixes
- Homophones
- Possessive apostrophes
- Dictionary work
- Noun phrases and fronted adverbials
- Inverted commas
- Expanding sentences with more than one clause using a range of conjunctions

This is year 4s - DO YOU HAVE SPECIFIC ATUMN OBJECTIVES FOR SPAG FROM YOUR OVERVIEW?

## 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 living things and their natural habitats focusing on classification. We will:

- identify common classification keys including the work of Linnaeus.
- classify living things into broad groups according to observable characteristics.
- observe local habitats and classify the living things discovered.



## ICT

We will be looking at HTML and Python.



## 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

Our topic will begin with looking at the most famous eruption of Mount Versuvius which took place in the year 79 A.D., when the volcano buried the ancient Roman city of Pompeii under a thick carpet of volcanic ash. We will also be considering other historic disasters.

## Geography

Our extreme earth topic is primarily geography based and will focus on:

- Describing how volcanoes are created and drawing conclusions about their locations.
- Describing how earthquakes and tsunamis occur.
- Analysing the impact on human and physical features following a natural disaster.
- Applying geography field work skills to consider, and plan for, an 'imaginary' tsumani in the local area.



## Art

Year 6 will study and recreate the 'The Great Wave at Kanagawa' by Hokusai using watercolour paint. The children will then apply all their art skills learnt across the key stage to produce their own interpretation of The Great Wave using a range of media and materials.



## P.E.

### Net games:

The children will improve their consistency of technique for different purposes within net games. They will practise incorporating tactics and shot technique into games.



### Dance:

The children will compose and adapt dance phrases with an 'Extreme Earth' theme. They will then create a performance linking the movements together incorporating music and props.

### Indoor athletics:

The children will be practising a range of track and field events including sprints, relay, long jump, speed bounce, ball throw and javelin.

### R.E.

Children will explore the Kingdom of God thinking about what kind of King is Jesus. They will then explore the People of God considering how following God could bring freedom and justice.

### Music

Children will:

- Learn a range of songs in order to improve their singing voices.
- Work independently and in groups to choose and use a range of instruments to compose an Egyptian sound story.



### PSHCE

PSHCE will include:

- Personalised targets for their learning.
- Class rules.
- New beginnings.
- Who am I? - learning about themselves and consider what makes them different.
- Going for Goals.
- Working collaboratively.



### French

Children will be following a French scheme of to recap known words and phrases, as well as learning new vocabulary relating to colours and Paris and its landmarks. 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:

- Pompeii and Mount Versuvius
- Volcanoes / Earthquakes / Tsnamis
- Recent disasters involving extreme weather e.g. The 2010 Haiti earthquake

**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.

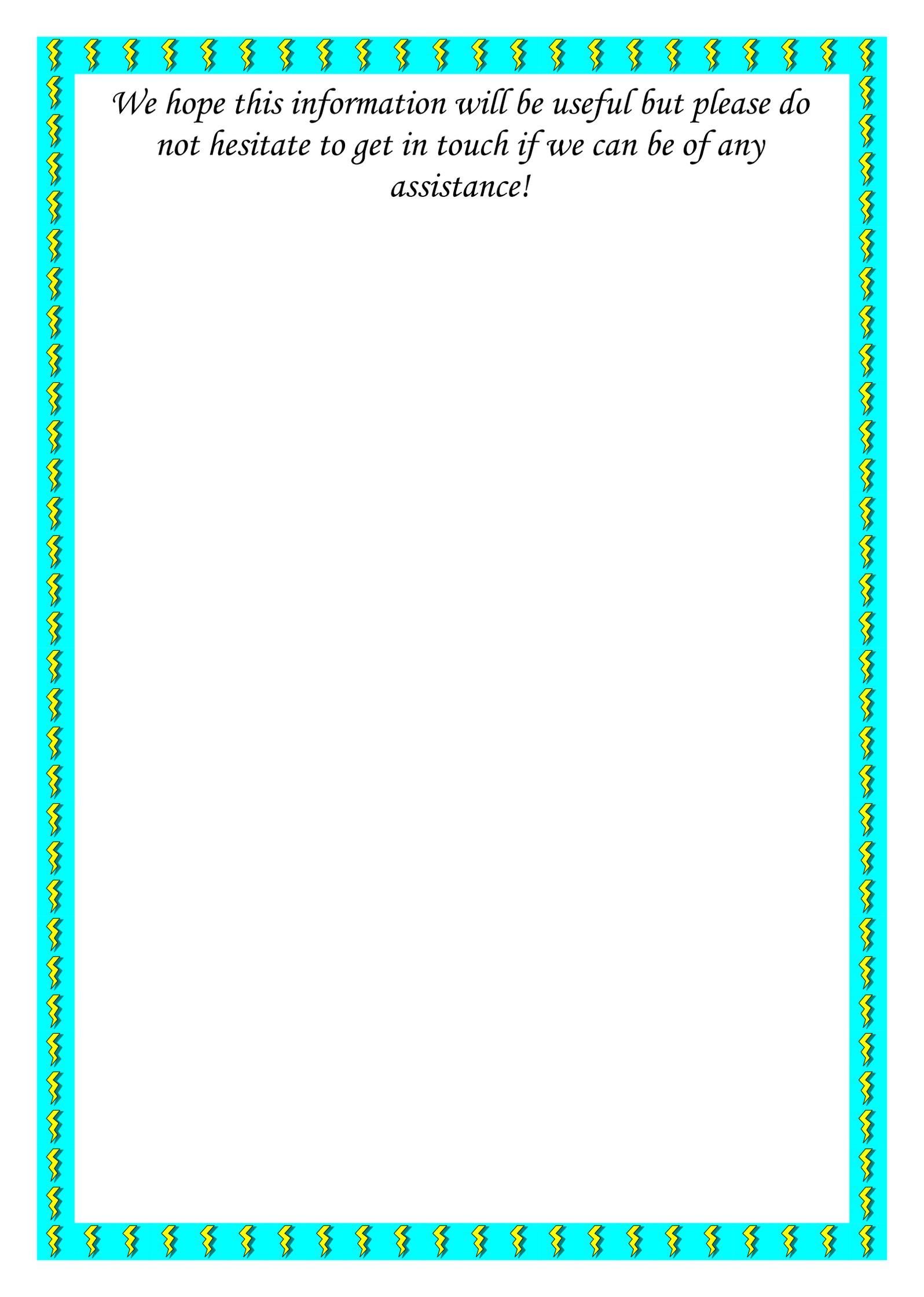
**Spelling challenges** will be given as regular homework. There will be a list of activities you could choose to do in order to practice these spellings. Please practice these with your child at least 3 times a week.

### 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!*