

Icknield Walk First School
Year 4 Long Term Planning - Autumn Term

<i>South America and the Rainforest</i>			
English	<p><u>Writing focus:</u></p> <ul style="list-style-type: none"> - Poetry (to perform) Harvest/Autumnal poems for Harvest Assembly - Persuasive writing - based around rainforest - Discussion - Different sides of an argument - Story Settings - Contrasting settings based around tribal home, rainforest and deforested area. <p><u>SPAG:</u></p> <ul style="list-style-type: none"> - Use of paragraphs to organise ideas around a theme - Fronted adverbials e.g. <u>Later that day</u>, the bulldozer was still there <p><u>Spoken language:</u></p> <ul style="list-style-type: none"> - Talking with others - rainforest debating - Oral rehearsing/presenting - Youth Speaks; harvest poetry 		
Maths	<p>Herts for Learning - Essential Maths See end of document for overview of mathematics in Year 4</p>		
Science	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><u>Living things and their habitats:</u> Pupils will be taught to: recognise that living things can be grouped in a variety of ways, explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment, recognise that environments can change and that this can sometimes pose dangers to living things.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><u>States of matter:</u> Pupils will be taught to: compare and group materials together, according to whether they are solids, liquids or gases, observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C), identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> </td> </tr> </table>	<p><u>Living things and their habitats:</u> Pupils will be taught to: recognise that living things can be grouped in a variety of ways, explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment, recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p><u>States of matter:</u> Pupils will be taught to: compare and group materials together, according to whether they are solids, liquids or gases, observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C), identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>
<p><u>Living things and their habitats:</u> Pupils will be taught to: recognise that living things can be grouped in a variety of ways, explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment, recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p><u>States of matter:</u> Pupils will be taught to: compare and group materials together, according to whether they are solids, liquids or gases, observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C), identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>		

Computing	<p>The internet</p> <p>During this unit learners will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. They will learn that the World Wide Web is part of the internet, and be given opportunities to explore the World Wide Web for themselves to learn about who owns content and what they can access, add, and create. Finally they will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information.</p>	<p>Audio editing</p> <p>In this unit, learners will initially examine devices capable of recording digital audio, which will include identifying the input device (microphone) and output devices (speaker or headphones) if available. Learners will discuss the ownership of digital audio and the copyright implications of duplicating the work of others. In order to record audio themselves, learners will use Audacity to produce a podcast, which will include editing their work, adding multiple tracks, and opening and saving the audio files. Finally, learners will evaluate their work and give feedback to their peers.</p>
History	n/a this term	
Geography	<p>Physical geography, including: <u>climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</u></p> <p>Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or <u>South America.</u></p> <ul style="list-style-type: none"> • Use of atlases and the internet to explore locations and physical features. • Detailed look of what a rainforest is • Human impact on the rainforest • A comparison between tribal life and our own <p>Linked to our Science work, whilst studying animals in the school environment, we shall map our findings according to location using a school map. (added 2021)</p>	

Art and design	<p><u>Sketch books:</u></p> <ul style="list-style-type: none"> - Full body self-portraits, plants from the local environment (close observation, line quality, shading) <p><u>Art and design techniques:</u></p> <ul style="list-style-type: none"> - Rainforest picture (Scale and proportion, observing colours, selecting suitable equipment for a task, comparing different fabrics) - Christmas decorations (observe and design textural art) - Calendar (Using a variety of stitches) <p><u>Great artists, architects and designers:</u></p> <ul style="list-style-type: none"> - Henri Rousseau 	
Design and technology	<p><u>Textiles - 2D shape to 3D product:</u></p> <ul style="list-style-type: none"> - Design, make, evaluate - 3D textile Christmas decorations 	
PE	<p>Swimming activities and water safety Falcon</p> <p>Invasion games - Quick sticks (hockey)</p> <p>Gymnastics - balance, rolls, tucks, pikes, travelling and performing sequences - analysing performance and improving</p>	<p>Swimming activities and water safety Falcon</p> <p>Creative dance / gymnastics linked with habitat work on rivers</p> <p>Invasion games - football</p>
RE	<p><u>Hinduism:</u></p> <ul style="list-style-type: none"> - Looking at Hindu beliefs and practises - Find out what Hindus teach their pupils about God and worship - Find out about the Hindu Trimurti, shrines, puja and Mandirs - Harmlessness and equality 	<p><u>Advent and Christmas around the world:</u></p> <ul style="list-style-type: none"> - Advent in the Christian church - Advent wreaths - Compare advent in Mexico - Pinata
PSHE	<p>Positive friendships, including online</p> <p>Feelings and Emotions</p> <p>Healthy relationships</p> <p>Responding to hurtful behaviour</p> <p>Managing confidentiality</p> <p>Recognising risks online</p> <p>Respecting differences and similarities</p> <p>Discussing difference sensitively</p>	

Music	Play it again - exploring rhythmic patterns	Christmas production preparation
French	Revision of coverage from Year 3 with the addition of written work and increased reading. <ul style="list-style-type: none"> - Greetings and goodbyes - Asking people how they are - What's your name? - The alphabet - My family - Numbers 0-12 - Happy Christmas 	
Trips	n/a	
Role Play	Looking at dilemmas related to deforestation Taking on the role of tribal people living in the rainforest Persuasive writing - writing and presenting adverts	
Events	Year 4 parents invited to harvest assembly Youth Speaks	Christmas production

Icknield Walk First School
Year 4 Long Term Planning - Spring Term

TOPIC	<i>VIKING RAIDERS</i>
English	<p><u>Writing Focus:</u></p> <ul style="list-style-type: none"> - Poetry - Viking sagas - Stories with a theme - A Viking seaborne adventure from point of view of one of the Vikings - Reports - Write a report about Viking life <p><u>SPAG:</u></p> <ul style="list-style-type: none"> - <i>Apostrophes to mark plural possession - the girl's name; the girls' names</i> - <i>Use of inverted commas and other punctuation to indicate direct speech [for example, a comma after the reporting clause; end punctuation within inverted commas - Thor shouted, "Give me back my hammer!"]</i> <p><u>Spoken language:</u></p> <ul style="list-style-type: none"> - Listening and responding - Digestion work; Viking research and newspaper reporting - Oral rehearsal/presenting - Viking sagas / poetry
Maths	See end of document for overview of mathematics in Year 4
Science	<p><u>Animals, including humans</u></p> <p>Pupils will be taught to:</p> <p>describe the simple functions of the basic parts of the digestive system in humans,</p> <p>identify the different types of teeth in humans and their simple functions,</p> <p>construct and interpret a variety of food chains, identifying producers, predators and prey,</p> <p>know that animals have different diets.</p>

Computing	<p>Photo editing</p> <p>In this unit, learners will develop their understanding of how digital images can be changed and edited, and how they can then be resaved and reused. They will consider the impact that editing images can have, and evaluate the effectiveness of their choices.</p>	<p>Data logging</p> <p>In this unit, pupils will consider how and why data is collected over time. Pupils will consider the senses that humans use to experience the environment and how computers can use special input devices called sensors to monitor the environment. Pupils will collect data as well as access data captured over long periods of time. They will look at data points, data sets, and logging intervals. Pupils will spend time using a computer to review and analyse data. Towards the end of the unit, pupils will pose questions and then use data loggers to automatically collect the data needed to answer those questions</p>
History	<p><u>The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor</u></p> <ul style="list-style-type: none"> - Viking raids and invasion - Resistance by Alfred the Great and Athelstan, first king of England - Further Viking invasions and danegeld - Where the Vikings came from - How the Vikings came to England and why - How the Vikings lived - Viking myths and legends 	
Geography	<p>Use of atlases and Internet based maps to look at where the Vikings travelled around Europe and beyond.</p> <p>Viking trade and economic links within Europe.</p>	
Art and design	<p>Sketch books</p> <ul style="list-style-type: none"> - Differences in animal teeth <p>Art and design techniques</p> <ul style="list-style-type: none"> - Longboat at sea - colour mixing, creating mood and feeling, the effect of light <p>Great artists, architects and designers</p> <ul style="list-style-type: none"> - Viking longboat design - strength and artistic features 	
Design and technology	<p><u>Cooking and nutrition</u> - tasting and discussing food from a different culture; prepare and cook Viking oatcakes and serve with fresh seasonal fruit</p> <p>Design, make, evaluate - Viking shields made using junior hacksaws</p>	

PE	<p>Swimming activities and water safety Falcon</p> <p>Gymnastics- Over and under work, building on variation of level, continue to progress balancing skills.</p> <p>Invasion games Tag rugby</p>	<p>Swimming activities and water safety Eagle</p> <p>Dance - Creative - Based around rivers</p> <p>Dance - Viking dance and manoeuvres</p> <p>Invasion games High fives (netball)</p>
RE	<p><u>Sikhism and belonging to a religion:</u></p> <ul style="list-style-type: none"> - Considering our own communities - Find out about the Khalsa, Khanda and 5K's - Worship at the Gudwara and the importance of 'Akhand Path' - Sharing food as part of worship - How Sikh communities welcome babies - The importance of Guru Nanak and the Guru Granth Sahib 	
PSHE	<p>What makes a community? Shared responsibilities How data is shared and used Making decisions about money Using and keeping money safe</p>	
Music	<p><u>Singing</u> - Preparation for Youth Makes Music Concert</p>	<p><u>Painting with sound</u> - exploring sound colours</p>
French	<p>Revision of coverage from Year 3 with the addition of written work and increased reading.</p> <ul style="list-style-type: none"> - How old are you? - Brothers and sisters - Do you have a pet? - Colours - The months of the year - Numbers 13-31 	
Trips	<p>Grafham Water residential</p>	
Role Play	<p>Acting out Viking sagas Day to day life of Vikings</p>	
Events	<p>Grafham Water residential Viking Day</p>	

Icknield Walk First School
Year 4 Long Term Planning - Summer Term

TOPIC	<i>Ancient Greece & Transition</i>	
Literacy	<p><u>Writing Focus:</u> - Explanations - based around science topics</p> <p><u>Writing Focus:</u> - Traditional tales - Myths</p> <p><u>Writing Focus:</u> - Writing and performing a play - a Greek play based around heroes</p> <p><u>SPAG</u> - <i>Noun phrases expanded by the addition of modifying adjectives, nouns and preposition phrases (e.g. the skeleton expanded to the fearsome skeleton with sharp teeth)</i></p> <p><u>SPAG</u> - <i>Appropriate choice of pronoun or noun within and across sentences to aid cohesion and avoid repetition (e.g. Jason stepped off the ship and he marched purposefully up the beach.)</i></p> <p>Spoken language:</p> <p>Questioning - science units based around sound and electricity;</p> <p>'What if' work - based around the Ancient Greeks (democracy, Olympics, etc)</p> <p>Talking with others - democracy debating</p>	
Numeracy	See end of document for overview of mathematics in Year 4	
Science	<p><u>Sound</u></p> <p>Pupils will be taught to:</p> <p>identify how sounds are made, associating some of them with something vibrating</p> <p>recognise that vibrations from sounds travel through a medium to the ear</p> <p>find patterns between the pitch of a sound and features of the object that produced it</p> <p>find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>recognise that sounds get fainter as the distance from the sound source increases.</p>	<p><u>Electricity</u></p> <p>Pupils will be taught to:</p> <p>identify common appliances that run on electricity</p> <p>construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</p> <p>recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>recognise some common conductors and insulators, and associate metals with being good conductors.</p>

Computing	<p>Programming A - Repetition in shapes</p> <p>This unit is the first of the two programming units in Year 4, and looks at repetition and loops within programming. Pupils will create programs by planning, modifying, and testing commands to create shapes and patterns. They will use Logo, a text-based programming language.</p>	<p>Repetition in games</p> <p>This unit explores the concept of repetition in programming using the Scratch environment. It begins with a Scratch activity similar to that carried out in Logo in Programming unit A, where learners can discover similarities between two environments. Learners look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition. Their final project is to design and create a game which uses repetition, applying stages of programming design throughout.</p>
History	<p><u>Ancient Greece</u></p> <p>Ancient Greece - a study of Greek life and achievements and their influence on the western world</p> <p>The fundamentals of democracy</p> <p>Greek culture</p> <p>Greek myths and legends</p>	
Geography	<p>Opportunities linked to Ancient Greece (mapwork, trade discussion, etc)</p> <p>Orienteering using the school site, including compass work.(added 2021)</p>	
Art	<p>Design, make, evaluate - Clay pots (sketch in charcoal, shape, paint)</p> <p>Technical knowledge - appreciate the suitability of thickness of the clay when shaping</p>	
D&T	<p><u>Electrical systems - simple circuits and switches</u></p> <p>'Dragon's Den' - understand and use electrical systems in their products [e.g. series circuits incorporating switches/bulbs/buzzers/motors]</p> <p>Children to design and develop their own electrical object.</p> <p>Look at the work of Alexander Graham Bell - his development of the telephone (linked to Science - Sound)</p> <p><u>Savoury Food</u> - preparing a variety of Greek meze (humus, tzatziki, etc) involving cutting, peeling and mixing</p>	

PE	Swimming activities and water safety Eagle (Tennis- Sports partnership - professional coach) Outdoor games - Striking / fielding; bat and ball skills and games; net / wall games;	Swimming activities and water safety Eagle Athletics - running, throwing and jumping Hockey (Quickstiks)
RE	<p><u>Special books and Sacred texts:</u></p> <ul style="list-style-type: none"> - What makes a 'special' book 'sacred'? - Look at Hindu Vedas, Bhagavad Gita and how they guide the daily lives of Hindus - Look at the Sikh special book - The Guru Granth Sahib. How do Sikhs treat this book? - Find out about the Bible (Old and New Testaments) - How do Christians believe the world began? 	
PSHE	Maintaining a balanced lifestyle Oral hygiene and dental care Personal hygiene routines Medicines and household products Drugs common to everyday life Road safety and keeping safe	
Music	Exploring singing games Salt, pepper, vinegar, mustard	Leavers Production preparation
French	Revision of coverage from Year 3 with the addition of written work and increased reading: <ul style="list-style-type: none"> - When's your birthday? - Days of the week - What's today's date? - Weather Should these prior goals be met, further extension work will be based around schools, food and locations in France.	
Trips	Visit to Fitzwilliam Museum and The Museum of Classical Archaeology in Cambridge	
Role Play	Acting out scenes from Greek Life Creating short plays based on Greek Mythology	
Events	Knex Challenge Year 4 leavers' event	

Spelling, punctuation and grammar (SPAG)

Where this will be incorporated as part of a literacy unit it is indicated in the termly plans above.

In addition, this year we will cover in specific grammar lessons the following:

- The grammatical difference between **plural** and **possessive -s**
- Standard English forms for **verb inflections** instead of local spoken forms [for example, we were instead of we was, or I did instead of I done]
- Use of commas after **fronted adverbials**
- Terminology the children will learn: **determiner, pronoun, possessive pronoun, adverbial**

Spoken Language Progression:

In addition to highlighted areas in the termly plans, **vocabulary** is constantly taught across all areas, especially through specific focussed sessions such as guided reading (including 'magpying'), SPAG sessions and topic specific work.

Working mathematically

By the end of year 4, children will apply their understanding of maths to solve a wide variety of problems with more than one step and be expected to prove their thinking through pictures, jottings and conversations. They will continue to make connections between different areas of maths and ask their own questions, working in an organised way to find solutions which help them identify common patterns or any errors more easily.

Number

Counting and understanding numbers

Children will be very familiar with numbers that have up to 4 digits and will be able to order and compare by showing them in different ways such as on a tape measure or using hands-on resources. Using their understanding of place value (how the value of each digit changes depending on its position in the number), children will be able to partition (break and make) numbers in different ways e.g. $2345 = 2000$ and 300 and 40 and 5 but could also represent this as 1000 and 1000 and 200 and 100 and 40 and 5 or 2000 and 200 and 145 . They will work with numbers securely up to $10,000$ and may begin to count beyond in 1 s, 10 s, 100 s and 1000 s. They will use this to help them find 10 , 100 or 1000 more or less than any given number. They will multiply and divide whole numbers by 10 and 100 and understand that this changes the value of each digit rather than 'just adding a 0 '. They will develop their understanding to decimal hundredths, comparing and ordering these using contexts such as money. Children will also learn about the pattern to find any Roman numeral to 100 .

Children will develop their expertise when counting forwards and backwards from 0 to include multiples of 6 , 7 , 9 and 25 ; decimals with up to 2 places and fractions. They will be able to fluently count in tenths, hundredths and simple fractions. They will develop their understanding of negative numbers through counting backwards through 0 . Children will be able to recognise and describe number patterns and relationships including multiples (e.g. 3 , 6 , 9 , 12 are multiples of 3) and factor pairs (e.g. 1 and 12 , 2 and 6 , 3 and 4 are all factor pairs for 12) for known times tables.

Calculating

Children will develop various strategies for solving $+$, $-$, \times , \div calculations mentally, using jottings when appropriate and for checking that their answers are sensible. Children will be encouraged to share their methods with others to help them see which work best, are quickest and most accurate. Over the course of the year, children will become fluent in all multiplication and division facts up to 12×12 and apply these facts to other problems e.g. $232 \times 7 = (200 \times 7) + (30 \times 7) + (2 \times 7)$. Children will use the $=$ sign to demonstrate equal value e.g. $3 \times 8 = 48 \div 2$ and solve missing number problems e.g. $3 \times ? = 48 \div 2$. They will explore patterns and rules for the times tables they learn and use pictures and objects to support their understanding.

Children will be required to solve problems accurately using the column addition and subtraction methods for numbers with up to 4 -digits and explain how the methods work. They will use apparatus to secure their understanding of these. This will include addition and subtraction calculations with different numbers of digits (such as $1286 + 357$); and numbers

containing 0s (such as 8009 - 3231). They will use formal written methods of short multiplication and short division for two and three digit numbers by a single digit. Children who become very adept at these types of calculations will be stretched through problems such as those containing missing numbers so that they know when, if and why they need to use the methods.

Fractions including decimals

Children will develop their understanding of fractions by comparing to, or finding a part of, the whole. Through hands-on resources, pictures or jottings, such as a number line, children will add and subtract two fractions with the same denominator (e.g. $\frac{2}{3} + \frac{2}{3}$). Children will solve problems involving fractions such as 'find $\frac{3}{4}$ of 20 litres' using their knowledge of multiplication and division and through practical equipment. Children secure their understanding that fractions and decimals are different ways of expressing numbers and proportions.

Measurement

Children secure their understanding of place value and decimals to record measurements accurately. They use their understanding of multiplying and dividing by 10, 100 and 1000 to convert between different units of measure of length (km, m, cm, mm), weight (kg, g) and money (£ and p). Children will link their understanding of area to multiplication and describe how to find the perimeter of a rectangle quickly. Children will read and write the time accurately using analogue and digital clocks, including clocks with Roman numerals. They will convert between units of time (hours, minutes and seconds). Children estimate, compare, calculate and solve a variety of problems involving all units of measurement.

Geometry

Children will extend their knowledge of shape to include more unusual quadrilaterals (four-sided shapes) and triangles. They will use increasingly more specific vocabulary such as parallelogram, rhombus and trapezium; scalene and isosceles. They refine their understanding of symmetry and solve problems where the shape is not displayed in its usual way (e.g. it might be on its side). Children find and name different angles and use this information to decide if a shape is regular or irregular. Children describe position and movement on a grid as co-ordinates and will plot points to draw 2-D shapes.

Statistics

Children will complete, read and interpret information on bar charts; they will solve problems that involve finding information in charts, tables and graphs; including time graphs.