

Curriculum Overview: Year 4

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Bullying: No Way!	Going Down Under	Inventions that changed the World	Here Come the Vikings!	Amazonia	Saving Planet Earth!
	This term we will be exploring the text's Krindlekrax and Cloud Busting, focusing on the PSHE issue that arises in each book - bullying. We will empathise with the main character, Ruskin and act in role to write a diary entry. We will also create a crocodile fact file. In Science, we will be learning about our teeth, eating, digestive system, predators and prey. We will be studying animals' teeth and their eating habits. This knowledge will be used in DT to create a model of a crocodile/crocodile's jaw where we will use different joins to achieve movement.	Throughout this topic, we will be developing our Geography skills to use maps and atlases to discover Australia! In Literacy, we will be exploring traditional tales and using the features to create our own. We will also be researching different facts about Australia and will use this to create a travel guide. We will be exploring the Aboriginal dot painting technique and will practice and master the skill to create our own paintings. Let the journey begin!	This term we will be studying inventors and their inventions. In History, we will be plotting events along a timeline to show significant inventions and their impact on our world. After researching different inventions, we will consider different problems that require solutions and will begin to develop our own imaginative inventions! This will involve using our art skills to create technical drawings and DT knowledge to create the invention. We will develop our persuasive writing skills, to then pitch this invention to the 'Dragons' in Dragons' Den!	The Vikings have invaded! We will learn all about the history of Viking invasions, where they settled and why. Comparing and contrasting Viking times to the present day. We will be reading Norse myths and legends, stories told about gods, giants and monsters, then write our own myth. We will also read Beowulf, the story of a terrifying quest to destroy a monstrous fire-dragon, writing a newspaper report detailing the important events from the story. Using our DT skills, we will be creating Viking longboats, working with a variety of materials.	As we explore the Amazon, we will have the opportunity to take a virtual journey to Amazonia, learning about its animals and plants as well as understanding how this habitat compares to our lives. We will have the opportunity to write descriptive poetry as well as creating a non- chronological Amazon travel guide. Our knowledge of the Amazonian climate will be applied in Maths, measuring and analysing temperature and representing it through the use of graphs. We will also replicate a well-known painting and consider the use of colour and composition.	What is climate change? How does it affect our lives? What effects does it have on the planet and the weather? We will be learning what we can do to ensure the survival of planet Earth through the investigation of renewable energy and investigating the environmental effects of power stations. We will write a news report to detail the effects and impact of a natural disaster. Our Geography skills will be developed through the use of atlases and virtual exploration of the Poles, including predictions of what might happen if the water levels continue to rise and the natural disasters that may occur as a result. In Art, we will develop our ability to blend and mix colours to depict landscapes, before and after the effects of climate change.
Visits/ Trips/ Workshops	London Zoo	Art Gallery Visit	Science Museum	Vikings Workshop	Rainforest animals workshop Residential Trip – PGL	Recycling Centre

Writing	Fiction: - Writing in role (diary entry)	Fiction: - Traditional moral tale (alternative story)	Fiction: - Narrative (alternative ending)	Fiction: - Historical narrative (myths)	Non-Fiction: - Non-chronological reports (travel guide) - Balanced argument (deforestation)	Fiction: - Narrative (dystopian fantasy story)
	Non-Fiction: - Non-chronological reports (crocodile fact-file)	Non-Fiction: - Instructional texts (dot painting) - Non-chronological reports (travel guide)	Non-Fiction: - Persuasive writing (and oral presentations)	Non-Fiction: - Newspaper report (invasion) - Letter (Vikings)	Poetry: - Haikus and Free verse (layers of the rainforest)	Non-Fiction: - News report script (natural disasters) - Persuasive letter (climate change)
	Poetry: - Figurative language (Cloud Busting)					
Suggested Texts	- Krindlekrax - Killer Crocodiles - Alligators and Crocodiles - National Geographic - The Tooth Book - Cloud Busting - The Enormous Crocodile	- Stories from the Billabong - Children's Book of Art – DK Publishing - Barefoot Books World Atlas - Atlas of Adventures - How the Kangaroo got her pouch - Mufaro's Beautiful Daughters	- Firework Maker's Daughter - See Inside Inventions – Usborne - Wallace & Gromit – Cracking Contraptions Manual - Rosie Revere, Engineer - Shirt Machine - My Crazy Inventions Sketchbook	- Norse Myths and Legends - Viking Gods - Beowulf - Friendly Matches - Vicious Vikings (Horrible Histories)	- The Great Kapok Tree - 100 Facts – Rainforests - The Vanishing Rainforest - What's up in The Amazon Rainforest - Eyewitness Amazon - Journey to the River Sea - Rainforest Animals	 The Promise Floodlands Climate Change – DK How the Weather Works Everything Weather – National Geographic Kids The Tin Forest
Maths	Number – Place Value Count in multiples of 6, 7, 9. 25 and 1000. Find 1000 more or less than a given number. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones) Order and compare numbers beyond 1000 Identify, represent and estimate numbers using different representations. Round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above and with increasingly large positive		Number – multiplication and division Recall and use multiplication and division facts for multiplication tables up to 12 × 12. Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Recognise and use factor pairs and commutativity in mental calculations. Multiply two digit and three digit numbers by a one digit number using formal written layout. Solve problems involving multiplying and adding,		Decimals Compare numbers with the same number of decimal places up to two decimal places. Round decimals with one decimal place to the nearest whole number. Recognise and write decimal equivalents to 14, 12 and 34 Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths Measurement- Money	
	numbers. Count backwards through zero to include negative numbers.		including using the distributive law to multiply two digit numbers by one digit, integer scaling problems		Estimate, compare and calculate different measures, including money in pounds and pence.	

Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.

Number- Addition and Subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

Estimate and use inverse operations to check answers to a calculation.

Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.

Measurement: Length and Perimeter

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Convert between different units of measure [for example, kilometre to metre]

Number – Multiplication and Division

Recall and use multiplication and division facts for multiplication tables up to 12×12 .

Count in multiples of 6, 7, 9. 25 and 1000 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

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Measurement- Area

Find the area of rectilinear shapes by counting squares.

Fractions

Recognise and show, using diagrams, families of common equivalent fractions.

Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.

Add and subtract fractions with the same denominator.

Decimals

Recognise and write decimal equivalents of any number of tenths or hundredths.

Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths Solve simple measure and money problems involving fractions and decimals to two decimal places. Convert between different units of measure [for example, kilometre to metre] Solve simple measure and money problems involving fractions and decimals to two decimal places.

Time

Convert between different units of measure [for example, kilometre to metre; hour to minute]
Read, write and convert time between analogue and digital 12- and 24-hour clocks.

Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Science

Animals including Humans (Teeth and Digestion)

- describe the simple functions of the basic parts of the digestive system in humans
- identify the different types of teeth in humans and their simple functions

Sound

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound

Electricity

- identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Working Scientifically

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests

Living Things and their Habitat

- 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

States of Matter (The Water Cycle)

- 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

	- construct and interpret a variety of food chains, identifying producers, predators and prey	and features of the object that produced it - find patterns between the volume of a sound and the strength of the vibrations that produced it - recognise that sounds get fainter as the distance from the sound source increases	- 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 - recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit - recognise some common conductors and insulators, and associate metals with being good conductors	- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers - gathering, recording, classifying and presenting data in a variety of ways to help in answering questions - recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables - reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions - using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions - identifying differences, similarities or changes related to simple scientific ideas and processes - using straightforward scientific evidence to answer questions or to support their findings	- recognise that environments can change and that this can sometimes pose dangers to living things	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
Learning Across the Curriculum	DT : Using different materials to create a model of a	Geography: Identifying and locating the different continents	History: Learning about great inventors and their creations.	History: Exploring the Viking and Anglo-Saxon struggle for the	Geography: Using maps and atlases to identify and locate the	Geography: Using maps to show the changes in climatic

(Foundation Subject Links)

crocodile/crocodile's jaw. Using different joins to create a moving model.
Considering healthy diets and linking to that of crocodile's.

PSHE/Citizenship:

Links to Krindlekrax and Cloud Busting to discuss friendships and bullying. We will learn to empathise with characters and different situations, using drama to help explore this.

ICT: Researching crocodiles and using information gathered to create a fact-file.

Computing:

- understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration
- use search
 technologies
 effectively,
 appreciate how
 results are selected
 and ranked, and be
 discerning in
 evaluating digital
 content

and climatic zones on a world map. Using maps and atlases to locate Australia and its physical and human features. Mapping migration to Australia and understanding the different reasons for this.

Art: Learning about traditional Aboriginal dot art paintings, learning the technique and using this to create our own artwork.

ICT: Researching Australia, its history, features and attractions. Understand how key events and individuals and designs have helped shape the world.

Art: Learning about great designers in history such, as Thomas Edison and Alexander Graham Bell. Using different brush strokes to produce shapes, textures, patterns and lines.

DT: Use research and develop design criteria to inform the design of our own inventions that are fit for purpose. Produce annotated sketches of our designs. Use a range of materials to create inventions. Understand and use electrical systems in our products (for example, series circuits incorporating switches, bulbs, buzzers and motors).

ICT: Use Microsoft PowerPoint to create an effective presentation for our inventions. Kingdom of England.
Learning about why
the Viking raids and
invasions occurred.
Considering the impact
the Vikings had on
England.

Geography: Mapping the Viking voyages on maps, using keys to explain.

DT: Designing Viking longboats and producing annotated sketches. Choosing appropriate materials to create these and joining the materials. Evaluating our models against our designs and using feedback from others to improve.

ICT: Researching the Vikings and applying information gathered to other areas of learning.

Amazon. Considering the types of tribes (settlements) and wildlife. Comparing geographical similarities and differences between England and Brazil.

Art: Learning about the artist Henri Rousseau and studying his painting 'Tiger in a Tropical Storm', looking at the use of colour. Plan composition and layout to recreate a version of the artwork using the artist's styles and techniques.

ICT: Use technology effectively and evaluate digital content.

zones and impacts of climate change on the Earth.

ICT: Researching the effects of climate change and finding images of its effects.

Art: Mixing and blending colours to create paintings of landscapes to show the before and after effects of climate change. Using collage to create a utopia and dystopia.

	Design, write and debug programs that accomplish specific goals.					
Music	Ukulele	Ukulele	Ukulele	Ukulele	Ukulele	Ukulele
RE What is special to me and the people in my community?	Religions in our neighbourhood	What makes me the person I am?	Why is the bible special?	Easter	Hindu worship	Marriage
PE	Gymnastics	Dance	Team Games	Basketball	Tennis	Athletics
French	Greetings, Classroom objects, Body parts	Animals, Family, Birthdays	Time, Celebrations, Places	Food and drink, Holidays, Clothing	Transportation, Sport, At school	Home, The weekend, My day
Family Learning Projects	Design your own creature that lives in the sewers. Label its features and write a description of it.	What is music? Use a range of materials to create an instrument that fits your idea of 'music'.	Do we need inventions? Research and create a timeline of the inventions that you think have changed the world, explaining their impact.	Use collage techniques to create a picture of a Viking.	Make a 3D model of an Amazonian animal using recycled materials.	The Earth will last forever. Design a presentation or leaflet to promote and encourage recycling.