Long Term Scheme of Learning YEAR 2022 – 2023 Year 4

	Term 1 (6 weeks, 3 days) INSET Thurs 21st and Fri 22nd Oct	Term 2 (7 weeks)	Term 3 (3 days, 6 weeks) INSET Tues 4th Jan	Term 4 (6 weeks) INSET Weds 16th March	Term 5 (5 weeks)	Term 6 (7 weeks) INSET Fri 8th July
Special Weeks				**World Book Week**		**Fitness Week**
English	**Text** Arthur and The Golden Rope; **Ignition activity** Artefact analysis Viking Day – craft and information stations **Main Fiction Outcome** Narrative **Main Non-Fiction Outcome** Non-chronological Report (Anglo-Saxons double page spread) **Incidental writing opportunities** Diary Setting description Character description Dialogue **Showcase** Display (hall)	**Text** The Wolves in the Walls by Neil Gaiman Other wolf depictions: Villains, the last wolf, 3 little pigs video (literacy shed) etc. **Ignition activity** Crime Scene, clues **Main Fiction Outcome** Innovated narrative: change perspective **Main Non-Fiction Outcome** Persuasive letter in character **Incidental writing opportunities** Character description Report on wolves **Showcase** Persuasion performances (record?)	**Text** The Iron Man by Ted Hughes **Ignition activity** Short video clip Marking out iron man in playground Creating Iron Man figures in art link (sculpture) Antony Gormley **Main Fiction Outcome** Narrative - Prequel **Main Non-Fiction Outcome** Newspaper Report - fictional **Incidental writing opportunities** Diary Setting description Dialogue Poetry **Showcase** Display (hall)	**Text** Edison by Torben Kuhlmann **Ignition activity** Science – use artefacts to create a submarine, so small toy can get treasure and stay dry. **Main Fiction Outcome** Narrative – alternative ending/innovation **Main Non-Fiction Outcome:** Instructions (based on DT) or fictional (How to make a mouse submarine) **Incidental writing opportunities** Letter Diary Invitations Biography Poetry **Showcase** Create an instructional video.	**Text** Jemmy Button by Valerio Vidali Dragonology **Ignition activity:** Find dragonologist artefacts inc. eggs / predict **Main Fiction Outcome** Original narrative **Main Non-Fiction Outcome** Non-chronological report based on a fictional stimulus **Incidental writing opportunities** Riddles Descriptions Diary Recount Poetry - Figurative language **Showcase** Create own PPTs on dragon species and habitats, present to class	**Text** The Great Kapok Tree **Ignition activity** Forest school read text / prediction Create rainforest in a box. **Main Fiction Outcome** Diary entry – The day of and the day after. **Main Non-Fiction Outcome** Persuasion – climate link **Incidental writing opportunities** Setting description Non chronological report on Rainforest. **Showcase** Display (hall)

Maths	**Number and Place Value** -count in multiples of 6, 7, 9, 25 and 1000 -find 1000 more or less than a given number -count backwards through zero to include negative numbers -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 numbers - 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 **Addition and Subtractions** - 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.	**Multiplication and Division** -recall 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 **Measurement, Length and Perimeter (2 weeks)** -measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres **Problems with 4 operations**	**Multiplication and Division** - multiply two-digit and three-digit numbers by a one-digit number using formal written layout - 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. **Measurement – Area** -find the area of rectilinear shapes by counting squares **Fractions and Decimals** -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 -recognise and write decimal equivalents of any number of tenths or hundredths -recognise and write decimal equivalents to a half, a quarter, three quarters. -compare numbers with the same number of decimal places up to two decimal places	**Fractions and Decimals** -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 -recognise and write decimal equivalents of any number of tenths or hundredths -recognise and write decimal equivalents to a half, a quarter, three quarters. -compare numbers with the same number of decimal places up to two decimal places -solve simple measure and money problems involving fractions and decimals to two decimal places. **Money** - estimate, compare and calculate different measures, including money in pounds and pence **Decimals** -find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths -round decimals with one decimal place to the nearest whole number	**Time** -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. -Solve problems with time **Statistics** Pupils should be taught to: -interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. -solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	**Geometry** -compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes - identify acute and obtuse angles and compare and order angles up to two right angles by size - identify lines of symmetry in 2-D shapes presented in different orientations -complete a simple symmetric figure with respect to a specific line of symmetry. **Measures** -Convert between different units of measure [for example, kilometre to metre; hour to minute] **Position and Direction** -describe positions on a 2-D grid as coordinates in the first quadrant -describe movements between positions as translations of a given unit to the left/right and up/down -plot specified points and draw sides to complete a given polygon **Problems with 4 operations** **Problems Solving Focus**

			-solve simple measure and money problems involving fractions and decimals to two decimal places.			
Science	**Light** - Understand that light travels at a high speed and in straight lines - Explain how we see objects - Sort opaque and transparent objects - Explain why we get shadows - Explain how mirrors work – plane, concave and convex - Use a prism to understand that white light is made up of spectrum colours	**Materials** - Compare and group materials (solids, liquids or gases) - Observe that some materials can change state when heated or cooled - Understand that temperature is recorded in degrees Celsius - Research temperatures linked with changing state	**Sound** • Understand that sound is caused due to vibrations and travel slower than light • Understand that sounds can travel through all the states of matter • Explore the qualities of sound and pitch and how these relate to our vocal chords • Understand the basic functions of the ear Name and label the parts of the ear	**Electricity** Identify appliances that run on electricity Construct a simple circuit and name the parts Use symbols to represent a circuit in a diagram Make predictions using knowledge of a complete and incomplete circuits Group materials according to whether they are conductors or insulators Draw conclusions and give reasons for why variations happen in some components -	**Classification of animals** · Sort and classify animals according to a variety of characteristics · Identify and sort a variety of vertebrates and invertebrates · List characteristics of different types of vertebrates and invertebrates	**Muscular and skeletal system** · Explain the function of a skeleton in humans · Explain the difference between voluntary and involuntary muscle movements · Explore the musculo-skeletal system · Name the main bones in the human skeleton by their scientific names · Understand the importance of x-rays and how the help ·

Geography	N/A	**Context: Locational knowledge of England** **Question: How do maps and compass and grid reference system help us find locations?** **Topic: UK geography – counties, cities and landmarks** Locational knowledge of England – Counties and significant cities Know the counties of region (South-east & London: Kent, Berkshire, Surrey, West Sussex, East Sussex, Essex, Buckinghamshire, Hampshire, Oxfordshire, Herefordshire) Know significant cities in England (London, Bristol, Manchester, Birmingham, Liverpool, Leeds, Sheffield, Newcastle). Identify characteristics of the England (famous landmarks both physical and human e.g. Dover Cliffs, Blackpool tower, Windsor Castle, Lake District, Angel of the North, Hadrian's Wall) - use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied -use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world -use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies		**Context: Locational knowledge of South America and the World** **Question: How does physical geography impact human behaviour? Question: How can I use the globe to understand climate and physical features?** Name countries within South America (Brazil, Equador, Chile, Bolivia, Colombia) Reference South American countries in relation to each other using the compass and North America Locate American continents in relation to the Artic Circle and Antarctic Circle. Identify the hemisphere (southern), latitude, longitude and time zones in relation to Greenwich Meridian mean time. Identify the position of Equator & the tropics of Cancer and Tropic of Capricorn Skills – use maps and, compass and grid references Skills – digital computer mapping Skills – use globes and atlases		**Context: Contrasting study: England and the region in South America (Recommendation: Peru)** **Question: How does human and physical geography interact? What are the differences and similarities between England and the region in South America (Peru)?** **Topic: South America (Peru/Brazil)** **Contrasting study: England and the region in South America (Peru/Brazil)** Know location of Peru and surrounding countries (Brazil, Equador, Chile, Bolivia, Colombia) Identify the country/countries location in relation to the globe: hemisphere (northern), latitude, longitude and time zones in relation to Greenwich Meridian mean time. Know geographical similarities and differences through the study of physical geography: Physical: Biomes and vegetation belts, climate zones, topography Know geographical similarities and differences through the study of human geography: Identify the different land use patterns within each area using maps and images (recreational, transport, agricultural, residential and commercial) and understand that aspects have changed over time. - Identify economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Skills – use maps and, compass and grid references Skills – digital computer mapping Skills – use globes and atlases.

		Skills – fieldwork record and present human and physical features (rivers and industry) Skills – Ordnance Survey and compass				

History	**Questions: How do artefacts help us create a picture of the past? Is history biased?** **Topic: Anglo Saxons** **Period study: Britain's settlement by Anglo-Saxons and Scots (*410 AD – 1066 AD*)** People: Jutes, Angles & Saxons, see below for known leaders, Augustine, King Ethelbert, Bede, Offa, Egbert, Alfred the Great, Athelson, Aethelred the Unready, Harold Godwin, Edward the Confessor, William the Conqueror, Hrothgar (Danish King). Events: After the Roman leave in 410AD, a series of Saxon tribes invaded Britain and over the course of 100 years create seven kingdoms (Kent, Sussex, Wessex, Northumbria, East Anglia, Mercia, Essex). Wessex becoming one of the most powerful Anglo Saxon Kingdoms. Following this the Vikings land and establish in East Anglia and Northumbria until. Eventually the two unite the country. Series of rulers and invasions (see below for details) Landmarks: Lindisfarne, Sutton Hoo, Offa's Dyke, All Saints Church Brixworth, St. Laurence's Church 700 AD, · Religious: establishment of Christianity, Sutton Hoo in AD 600, Cultural: Beowulf- epic poem, Runes, Pit houses, feasts, Bede Chronicles- writing of History since Caesar, Anglo Saxon crosses, town names including etymology e.g. West Super Mare (two Saxon words West and - tun or settlement, S means on or above, Mare		**Questions: How do artefacts help us create a picture of the past? Is history biased?** **Period study: Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor *(AD 789 – AD 1066)*** People: Jutes, Angles & Saxons, see below for known leaders, Augustine, King Ethelbert, Bede, Offa, Egbert, Alfred the Great, Athelson, Aethelred the Unready, Harold Godwin, Edward the Confessor, William the Conqueror, Hrothgar (Danish King). Events: After the Roman leave in 410AD, a series of Saxon tribes invaded Britain and over the course of 100 years create seven kingdoms (Kent, Sussex, Wessex, Northumbria, East Anglia, Mercia, Essex). Wessex becoming one of the most powerful Anglo Saxon Kingdoms. Following this the Vikings land and establish in East Anglia and Northumbria until. Eventually the two unite the country. Series of rulers and invasions (see below for details) Landmarks: Lindisfarne, Sutton Hoo, Offa's Dyke, All Saints Church Brixworth, St. Laurence's Church 700 AD, · Religious: establishment of Christianity, Sutton Hoo in AD 600, Cultural: Beowulf- epic poem, Runes, Pit houses, feasts, Bede Chronicles- writing of History since Caesar, Anglo Saxon crosses, town names including etymology e.g. West Super Mare (two Saxon words West and - tun or settlement, S means on or above, Mare means sea), Frome (Fast flowing river), Avon (River), Technological: weaponry (sashes & shields), ploughs, cooking pots, coinage, iron age.		**Question: How do conflicting primary sources help us to build a picture of the past?** **Topic: Mayan Civilizations** **Era Study: a non-European to provide contrast with British History (250 BC – AD 900)** People: Ahau Pacal Votan ruler, Sun God, Maize God, Sky Events: 900AD end of Classical Period, collapse of some Mayan cities. Cause unclear potentially war, social strife, environmental change. Mayan culture continued elsewhere and new city states emerged. Landmarks: The Great Pyramid built at city of Venta, El Castillo Pyramid, Kukulcan in Chichen Itza (at which during the spring and autumn equinox a shadow is cast resembling a snake) Religious: polytheist encompassing nature, astronomy and rituals. 165+ Gods are represented in nature i.e Sun God (Kinih Ahous) and Maize God (Yum Kaax). Mayan Creation story – they believed that people were made from mud, wood and then maize, the last one and white and yellows maize dough and the blood of the Gods. The first humans were four men and four women. The Gods were cross with the humans for not worshipping them. Cultural: Classical Period 250AD to 900AD) Every person had an animal companion that shared there soul (Way Ob). Every King had a Jaguar companion. Human sacrifice (slaves, captured enemies and children) at the temples, in particular children were sacrificed to	

	means sea), Frome (Fast flowing river), Avon (River), Technological: weaponry (sashes & shields), ploughs, cooking pots, coinage, iron age. Social and economic: villages such as reconstruction at West Stow, burial grounds. Hierarchy: kingdoms, rulers, monasteries.		Social and economic: villages such as reconstruction at West Stow, burial grounds. Hierarchy: kingdoms, rulers, monasteries.		appease the rain God during periods of drought. Sport Ulama, ball games from 1400BC, rubber ball game a bit like basketball using any bit of the body except hands and feet. They had championships between rival kingdoms and states and they played to the death. Technological: Maya begin to form larger settlement like Copan and Chalchuapa 1000BC. 700BC development of writing and their script from that period is the only one to be fully deciphered. 400C Mayan calendar called the 'Long Count'. 3000BC adopted idea of a monarchy. 100BC city state of Teotihuacan in the Valley of Mexico is built and the first Pyramids are built. Astronomers (measured the exact length of the solar year and the lunar month) and developed advance mathematical skills (had the concept of 0 before Europe). Sophisticated water management systems with canals and irrigation. Social and economic: 600 AD City at his peak. Cities planned on a Grid system, wealth from agriculture and trades. Several cities blossom, connected by roads (Sacbeob) cut through the jungle in limestone beds. Gave rise to cities like Tikal and Chichen Itza. The importance of maize. No grazing animals so forests were not cleared. · Hierarchy: Kings in most Maya cities, ruled with 'divine right.' Their power was asserted by the Gods. Nobles were 10-15% of the population. Vast majority of people were farmers and workers, artisans who sometimes had to conduct unpaid work.	

Art	**Drawing (All term)** Line – Patterns and texture – Tone and Form – Colour Artist study: Line: Hong Chung Zhang Pattern & texture: Bridget Riley Tone / Form: Dame Elisabeth Frink& William Roberts **3D** Continue to experiment with a variety of malleable media e.g. Clay and Modroc. • Work in a safe, organised way, caring for equipment. • Secure work to continue later. • Record media explorations to develop ideas. Use a sketchbook to plan, collect and develop ideas, including patterns and mark making designs. **Project: Clay Vikings** Artist study: • Modroc: George Segal • Other sculpture: Claes Oldenburg **Resources:** - Clay - Modelling tools	**Printing (All term)** Experiment with large scale and collaborative learning (whole class) e.g. colour a piece of fabric before printing. Establish routines of setting up printing equipment e.g. rollers, newspaper if using acrylics. Experiment with press printing e.g. mark making into Styrofoam using pencil or ballpoint pens (link to mark making bank and patterns in Drawing). Use 2-3 colours/ tones to show objects having a third dimension. Use press printing to create simple patterns. Continue to explore both mono-printing and relief printing, experimenting with 3 colours. • Experiment using different colours of poster paint to create prints e.g. lighter to darker tones or vice versa. **Project: Create a wolf Portrait.** Artist study: • Glen Alps • Jerry Di Falco **Resources:** - Styrofoam - Ink / rollers / ink trays - White fabric - Fabric dyes (tie dye)	**N/A**		**Painting (All term)** Cover skills first Revisit routines of setting up painting equipment. Using water based paints [powder paint, water colour or poster paint]: • Paint lines and shapes with equal consistency. Using water based paints [powder paint, water colour or poster paint]: • Mix tertiary colours to create shades and tones within the same picture/painting. Using water based paints [powder paint, water colour or poster paint]: • Explore the effect on paint by adding water, PVA glue, sand, sawdust. • Confidently control the types of marks made and experiment with different effects and textures e.g. blocking in colour, washes, creating textural effects by thickening paint. Using water based paints [powder paint, water colour or poster paint]: • Mix and match colour, shades, tints and tones with increasing confidence • Begin to show understanding of complimentary colours using a colour wheel to support this. • Identify primary, secondary, complementary and contrasting colours. **Project: Rainforest Collaborative piece – individual animals** Artist study: • Paul Klee • Stuart Davis • Lucy Austin **Resources:** -Paints / brushes - Sand / sawdust	**Collage (3 weeks)** Cut, arrange and attach materials (paper, card, plastic, fabric) using tools (scissors, glue). Collect and select paper-based materials developing a background for a collage. **Project: recycling art – create a group dragon.** Artist study: • Friedrich Stowasser • Mark Wagner • Nancy Standlee **Resources:** - scrap paper - shiny paper - Tissue paper - old wrapping paper - Plastic bottle lids. - Fabric Scraps - Large cardboard boxed for dragon shape.

DT	**N/A**		**Structures** **Project: Design, make and evaluate a robot / bridge using 3D shapes** Resources: - Cardboard - Tubes - Straws - Glue - Tape - Corrugated card Create bit by bit.	**Electrical Systems** **Project: Design a game with electrical components** Buzz wire game **Resources:** Copper wire Bottle tops with hold in top. Blue tac / play dough. Box to hide mechanism.	**N/A**	N/A
RE	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**
PE	Real PE 1 Complete P.E - football	Real PE 2 Complete P.E. - Dance	Real PE 3 Complete P.E. - Gym	Real PE 4 Complete P.E. - Tennis	Real PE 5 Complete P.E. - Athletics	Real PE 6 Complete P.E. - Cricket
FVC	**Jigsaw**: Being Me in My World Learning behaviour: Aspiration/Motivation **Year B Value: Friendship** Year A Value: Respect **No Outsiders Book**: Dogs Don't Do Ballet	**Jigsaw**: Celebrating Difference Learning behaviour: Collaboration **Year B Value: Fairness/Justice** Year A Value: Thankfulness **No Outsiders Book**: King and King	**Jigsaw**: Dreams and Goals Learning behaviour: Self-evaluation **Year B Value: Contribution** Year A Value: Truth and Honesty **No Outsiders Book:** The Way Back Home	**Jigsaw**: Relationships Learning behaviour: Resilience **Year B Value: Loyalty** Year A Value: Responsibility **No Outsiders Book:** The Flower	**Jigsaw**: Healthy Me Learning behaviour: Focus **Year B Value: Courage** Year A Value: Kindness **No Outsiders Book:** Red – A Crayon Story	**Jigsaw**: Changing Me Learning behaviour: Curiosity **Year B Value: Forgiveness** Year A Value: Humility

	Digital literacy (T1)	Computing (T2)	Computing (T3)	Information Technology (T4)	Information Technology (T5&6)
Computing	**Researching to create own report on Vikings and Anglo Saxons** • 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 • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. **Information Technology Powerpoint** • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • create own presentations to answer individuals questions in History	**Creating a computer game using Scratch to support multiplication** Barefoot Algorithm thinking. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	**Creating a computer game using Scratch - design choice** design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs **Digital literacy** **Using digital maps (Geography link) – rivers of England**	**Powerpoint & Word** • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • create own presentations to answer individuals questions in History (The Maya) (4 weeks in face-to-face)	**Excel – collect data in maths, PE, Science** Digital computer mapping -select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information -Represent data in Excel **E-safety:** Childnet Storyboard competition? **Scratch week:**

MFL	Term 1 **Re-cap** • A recap of core questions and answers (eg. Name, age, how are you, descriptions, alphabet, colours) • Learn the target language alphabet and how to answer, “How is it spelt?” • Re-cap of sports with alphabet focus.	Term 2 **Weather and Seasons** • Learn weather phrases in target language. • Learn seasons • Learn compass points in target language	Term 3 **Clothes** • Learn clothing items. • Re-cap of colours and clothes description. • Recap with weather + sports with clothes. (Je porte/Llevo)	Term 4 **Clothes continued** • Re-cap of clothes vocab • Building towards “event”: fashion show, shop role play, clothes designing.	Term 5 **Little Red Riding Hood**	Term 6 **Little Red Riding Hood**

Music	**String Instruments** **(1h per week)** - 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	**String Instruments** **(1h per week)** -play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression -develop an understanding of the history of music.	N/A	N/A	N/A	N/A