YEAR 5 CURRICULUM MAP (TOPICS MAY BE MOVED AROUND AT TEACHERS' DISCRETION) CROSS-CURRICULAR LINKS OPPORTUNITIES FOR SPIRITUAL EXPERIENCES MATHS LINKS (SEE DETAILS BELOW) CROSS CURRICULAR WRITING OPPORTUNITIES

SUBJECT	AUTUMN		SPRING		SUMMER	
SCIENCE	Properties of Materials: Separation and recovery, reversible/non-reversible change. AW AQ Writing Link: Explanation Maths links: Number, Measurement		Forces: Gravity, air/water resistance, friction etc Magnetism AW OPU AQ Maths links: Measurement, Statistics	Animals inc. Humans: Life cycles, animals & humans, human changes, Reproduction of plants AW OPU Maths link: Measurement	Earth and Space. Shadows & light. Phases of the moon & tides etc. AW OPU AQ Writing Link: Action (Movement of the Moon) Maths links: Measurement, Number, Statistics, Scaling	
R.E.	Value: THANKFULNESS UNIT U2.1: What does it mean if Christians believe God is holy and loving? AW AQ INS	Value: TRUTHFULNESS UNIT U2.8: What does it mean to be a Muslim in Britain today? AW AQ OPU INS Remembrance Day Class Assemblies	Value: COMPASSION UNIT U2.2: Creation and Science: Conflicting or complementary? Writing Link: Persuasion	Value: HUMILITY UNIT U2.4: Christians and how to live: 'What would Jesus do?' Church Service - Easter	Value: HOPE UNIT U2.9: Why is the Torah so important to Jewish people? AW AQ INS Writing Link: Explanation	Value: FRIENDSHIP UNIT U2.12: How does faith help people when times get hard? (Sikhism) AW AQ INS
HISTORY/ GEOGRAPHY	Class Assemblies South America & physical features. The rainforest: plants, animals, tribes, conservations, etc. AW OPU AQ	The Maya OPU AQ Maths links: Number, Measurement	AW AQ OPU INS British History: Kings and Queens (Tudors) AW OPU AQ Writing Link: Non-chronological report Maths link: Number		World map, continents, countries of the world, hemispheres Writing Link: Setting description Maths link: Geometry	Time Zones Local Area Study: Maps and aerial photographs Maths link: Measurement
ART/DESIGN	Rainforests: sketching skills, explore line and colour South American art: create own work in the style of S.A. art/artists AW AQ INS		Historical Art: Tudors Portraits of the monarchs		Famous artworks: observe and comment on style, mood, use of colour etc AW AQ INS Brush techniques.	
D.T.	Design their own T-Shirt using ideas from the rainforest colours and animal skins AW AQ INS		Food Technology mini-project: "Burgers" (Plan Bee)		Mechanisms and Cams. AQ INS Maths links: Measurement, Geometry	
P.E.	iPEP Topics Gymnastics: Balance Invasion Games: Rules and Concepts AQ	iPEP Topics Gymnastics: Travelling and Turning Games: Striking and Fielding INS	iPEP Topics Dance History: Victorians Invasion Games: Teamwork	iPEP Topics Dance: Space (Science) Net Games: Accuracy, Rallies	iPEP Topics Gymnastics: Abstract Angles Strike and Field Games: Cricket	iPEP Topics Dance Style: Rock n Roll Athletics: Olympic Training Sports Day INS Maths link: Measurement
COMPUTING	E-Safety —	3D Modelling: Sketchup	Internet Research	Radio Station	Scratch Coding	Musical Micro:bit
MUSIC	DPA-led Music lessons (weekly) Teacher-led follow-up sessions Class assemblies Rainforest music		Easter service AW OPU		· · · · · · · · · · · · · · · · · · ·	
PSHE (inc. HRE)	Healthy Living: healthy meals; nutrients & portion control; food labels; drug-taking risks	Anti-bullying Week activities. Understand peer-pressure Democracy: fair and unfair	Wider World: understand why we donate to charity; tax deductions; migration; gender stereotyping	E-safety: keeping safe online; know who to go to for help/support Well-being: road/cycle safety	Relationships: qualities of good friends; healthy relationships; what does it mean to 'belong'.	Well-being: emotional/physical changes in puberty; personal hygiene; human life cycle, develop a growth mind-set.
MFL	Language Angels online Spanish	platform				

SCIENCE

Working scientifically

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Living things and their habitats

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- describe the life process of reproduction (HRE) in some plants and animals.

Animals, including humans

describe the changes as humans develop to old age. (HRE)

Maths: Compare length of life cycles and gestation periods. Convert weights.

Properties and changes of materials

- compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- demonstrate that dissolving, mixing and changes of state are reversible changes
- explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Earth and space

- describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Maths: Measure and record length of shadows. Order planets by distance from the sun. Develop an understanding of scale when considering the solar system.

Forces

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Maths: Read Newton meters and compare forces.

R.E.

Festivals Harvest, Remembrance, Christmas, Eid, Diwali, Easter, Mothering Sunday

New Worcestershire Agreed Syllabus Units:

U2.1: What does it mean if Christians believe God is holy and loving? U2.2: Creation and Science: Conflicting or complementary? U2.4: Christians and how to live: 'What would Jesus do?' U2.8: What does it mean to be a Muslim in Britain today? U2.9: Why is the Torah so important to Jewish people? U2.12: How does faith help people when times get hard? (Sikhism)

HISTORY

Pupils should be taught about:

- changes in Britain from the Stone Age to the Iron Age
- the Roman Empire and its impact on Britain
- Britain's settlement by Anglo-Saxons and Scots
- the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor
- a local history study
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 (e.g. kings and queens, Battle of Britain)
- the achievements of the earliest civilizations an overview of where and when the first civilizations appeared and a depth study of one of the following:
 Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China
- Ancient Greece a study of Greek life and achievements and their influence on the western world
- a non-European society that provides contrasts with British history one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.

Maths: Mayan number system, order dates of key events. Calculate lengths of reigns and life spans for Tudors.

GEOGRAPHY

Pupils should be taught to:

Locational knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key
 topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed
 over time
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Place knowledge

 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 South America

Human and physical geography

- describe and understand key aspects of:
- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-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.

Maths: Estimating the coverage of forests and number of trees, plants animals, how much forest has been lost/conserved. Time zones. Use 4 & 6 figure grid references and compass points.

ART/DESIGN D.T.

Pupils should be taught:

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history.

When designing and making, pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes,
 pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world
- Technical knowledge
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Maths: Measure lengths and use 2D shapes in nets, when building a Tudor house.

P.E.

Pupils should be taught to:

- use running, jumping, throwing and catching in isolation and in combination
- play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending
- develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- perform dances using a range of movement patterns
- take part in outdoor and adventurous activity challenges both individually and within a team
- compare their performances with previous ones and demonstrate improvement to achieve their personal best

Maths: Measure lengths for throwing and jumping, time for races.

I.C.T.	 Pupils should be taught to: 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 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 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (HRE)
MUSIC	 Pupils should be taught to: play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression 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 develop an understanding of the history of music.
MFL	Pupils should be taught to: listen attentively to spoken language and show understanding by joining in and responding explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help speak in sentences, using familiar vocabulary, phrases and basic language structures develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases present ideas and information orally to a range of audiences read carefully and show understanding of words, phrases and simple writing appreciate stories, songs, poems and rhymes in the language broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary write phrases from memory, and adapt these to create new sentences, to express ideas clearly describe people, places, things and actions orally and in writing understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English