Winton Primary School

Curriculum Map – Year 4: Autumn Term (1)

Topic Theme:	Inventors and Explorers							
English	1	2	3	4	5	6	7	8
	Spellings taught weekly							

Autumn 1	Film: Farther – Graham Baker-Smith Writing outcomes: To write a sequel *SMSC Themes* • *Resilience (link to school creed)* • *Family ties, importance of family. Different types of family.* • *How inventions and innovation can help people – the difference it can make to people's lives? (Continuation from Y3 themes)*	Book: Shackleton's Journey – William Grill Writing Outcomes: To write a biography about Shackleton To write a blog/ newspaper report about Shackleton's Journey *SMSC Themes* • *Leadership – leading others in the face of adversity. Making difficult decisions.* • *How experiences can shape progress (link to creed: learning from mistakes). Trial and error.* • *Human impact on the wilderness environment.*

Mathematics	1	2	3	4	5	6	7	8

Autumn 1	**Place Value**	**Addition and Subtraction**
	• 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.	• 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.

The grid above shows all the topics that will be covered during the term, however teachers will vary the order in which the units are taught depending on the needs of the class at the time.

Science	Working Scientifically: comparing the teeth of carnivores and herbivores and suggesting reasons for differences; finding out what damages teeth and how to look after them. They might draw and discuss their ideas about the digestive system and compare them with models or images. P.O.S: Animals, including Humans Key Scientists: Pierre Fauchard (the 'Father of Modern Dentistry) https://en.wikipedia.org/wiki/Pierre_Fauchard *SMSC Themes* • *Importance of the dentist, looking after your teeth, healthy life choices (links to PSHE)*	Computing	E-Awareness: *Discuss safety rules/sign AUP* *Logging on to laptops, accessing software.* *Using LGFL login and password at home and school* *ThinkUKnow Cybercafe Lessons* *LGFL resources* *including 'Us Online'* Online Research, *Search Criteria and key words* *Search results (summaries, domains, adverts/sponsored results)* *Copyright* Online Publishing *Online communication and gaming* *Email skills, Use of appropriate alias*

History	The Roman Empire and its impact on Britain This could include: • Julius Caesar's attempted invasion in 55-54 BC • the Roman Empire by AD 42 and the power of its army • successful invasion by Claudius and conquest, including Hadrian's Wall • British resistance, e.g. Boudica • "Romanisation" of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity in *(SMSC: the impact of technology, culture and beliefs, including early Christianity)* *SMSC Themes:* • *Difference between invading and settling – the morality of having power in other people's lands (nb: this will further deepen in Y6 work on migration)* • *Life in the Roman army – did people struggle for their beliefs or to survive? Slavery in Roman Empire? Did that make them 'bad' people?* • *British Values - Understanding and Appreciating **Democracy:** the structure of the Roman Consulate – how roman's used the vote. The difference between voting and having an emperor.* *Theme: who had the right to vote? Is this really democratic? How does it compare to our own understanding of democracy today?*	Geography	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)- *(Link to Shakleton's journey)* *Look to complete a study of the South Pole* *SMSC Themes* *Look to complete a study of the South Pole* • *Spiritual / Natural Appreciation - Are there 'sacred' places? Places in which we should / should not do certain things? (NB: Progress? Technology?* • *Consider whether all developments are good – can they sometimes cause harm?* **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*(Link to Shakleton's journey)* 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 *(Link to Julius Caesar's invasion)* *SMSC Themes:* • *The importance of inventions (continued from Y3). Roman inventions, human inventions* • *How humans impact land? Human impact and research in the South Pole – research, tourism* Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied *Cultural Capital – children should remember/locate 20 capitals*
Religious Education	Celebration of our differences within school (revising previous learning). Preparation for Focus Day: Myself and Others	**Physical Education**	Dance & movement skills (SCIS) Net/wall games (SCIS)
Art and Design	Roman Mosaics	**Design and Technology**	

M.F.L.	Spanish	Music	Music objectives are taught, revisited and refined throughout the year:
			• I can perform a simple part rhythmically.
			• I can sing songs from memory with accurate pitch.
			• I can improvise using repeated patterns.
			• I can use notation to record and interpret sequences of pitches.
			• I can use notation to record compositions in a small group or on my own.
			• I can explain why silence is often needed in music and explain what effect it has.
			• I can identify the character in a piece of music.
			• I can identify and describe the different purposes of music.
			• I can begin to identify the style of work of Beethoven, Mozart and Elgar
			Instrumental Tuition: Recorders
P.S.H.E	Police Engagement Programme: Road Safety Online Safety PSHE/Financial Education: • How to manage money: ◦ Ways to pay 1/2/3 ◦ Earning Money 1/2/3 ◦ Role of Charities 1/2/3	**School Trips and Educational Visits**	British Museum

![Winton Primary School logo] Curriculum Map – Year 4: Autumn Term (2)

Topic Theme:	Inventors and Explorers							
English	1	2	3	4	5	6	7	8
Autumn 2	Book: Templeton Twins – Ellis Weiner Holmes Writing outcomes: To write a mystery story told by the narrator *SMSC Themes* • *Crime – Why do people commit crime?* • *taking responsibility vs blaming others for own mistake* • *British Values: The role of 'the rule of law' in preventing crime*				Book: Shakespeare Stories – Julius Caesar *SMSC Themes* • *Was he a 'great leader'? (nb: brilliant at strategy vs moral choices)* Writing Outcomes: To write a play script *SMSC Themes* • *Cultural Capital: have an understanding in the role that theatre plays in society (acting, performance, entertainment etc).* • *Without this, would we have TV? Films?*			

Mathematics	1	2	3	4	5	6	7	8
Autumn 2	**Multiplication & 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 ▪ 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.		**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.	**Measurement** ▪ Convert between different units of measure [for example, kilometre to metre; hour to minute] ▪ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ▪ find the area of rectilinear shapes by counting squares ▪ estimate, compare and calculate different measures, including money in pounds and pence Financial Education Outcomes: - Keeping Records, financial records			Review, Consolidate, address misconceptions, deepen learning.	

The grid above show all the topics that will be covered during the term, however teachers will vary the order in which the units are taught depending on the needs of the class at the time.

Science	Working Scientifically: observing patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be use to connect across a gap in a circuit. P.O.S: Electricity Key Scientists: Benjamin Franklin and Thomas Edison *SMSC Themes* • *Developing world, places without electricity. Basic human needs, rights, conditions*	**Computing**	Programming and Computational Thinking throughout http://barefootcas.org.uk Espresso Coding Scratch Islington Y4 Unit 1 Publish work online. Embed into LgfL j2e5 publish to j2webby. Networks and Communications Unit (8 lessons) *SMSC Themes* • *Contrast: what is acceptable in real life vs what we see in computer games? (link to 'the rule of law')* *Importance of following a process over time for a long term outcome (inc. trial and error; not giving up; resilience)*
History	The Roman Empire and its impact on Britain This could include: • Julius Caesar's attempted invasion in 55-54 BC • the Roman Empire by AD 42 and the power of	**Geography**	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 *(Link to Julius Caesar's invasion)* Use maps, atlases, globes and digital/computer mapping to

	its army • successful invasion by Claudius and conquest, including Hadrian's Wall • British resistance, e.g. Boudica • "Romanisation" of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity *SMSC Themes* • *Cultures living and existing side by side.* *How has the UK ben influenced by other cultures that have settled here? Look at a high street in London. How do we celebrate diversity?* *Using accounts* *Lending and borrowing*		locate countries and describe features studied *SMSC Themes* *Diversity of London (BV: Tolerance of other faiths, beliefs etc)*
Religious Education	Myself and Others	**Physical Education**	Dance & movement skills (SCIS) Net/wall games (SCIS)
Art and Design	Outcomes: Collage of a Tsunami *SMSC Themes* *Aesthetic appreciation: can something that is terrible also be beautiful (eg, art of tsunami – but in real life it causes a lot of damage). Link to Y3 themes.* *Japanese picture: "wave and fishing boats" (google)*	**Design and Technology**	Design , make and evaluate making a 3D model of a volcano *SMSC Themes* *See Art and Design*
M.F.L	Spanish	**Music**	Music objectives taught, refined and revisited throughout the year. See 'Autumn 1' for objectives. Instrumental Tuition: Recorders
P.S.H.E	Anti-Bullying Week	**School Trips and Educational Visits**	Benjamin Franklin Museum

Curriculum Map – Year 4: Spring Term

*Spring 2 only 5 weeks including Science week.

Topic Theme:	World War II					
English	1	2	3	4	5	6
Spring 1:	Book: Lion and the Unicorn – Shirley Hughes Writing outcomes: To put themselves in the story and write in the perspective of a character *SMSC Themes* • *Bullying. Acceptance. Fairness.* • *Treating people differently based on their religious beliefs (British Values: Tolerance).*			Book: Friend or Foe – Michael Morpurgo Writing Outcome: Writing a cliffhanger suspense story *SMSC Themes* • *When is something 'wrong'? How do we learn lessons from history? How does our experience inform our moral choices?* • *Great British leaders – Winston Churchill* • *What was Churchill like as a person? Do you have to be a "nice person" to be a great leader? (Comparisons with previous leaders studied: Julius Caesar, Shackleton…)*		
Spring 2	Book: Friend or Foe – Michael Morpurgo Writing Outcome: 1st person perspective/ writing to make a moral decision *SMSC Themes* *Continuation: What are moral decisions? When is something right?*			Book: What are we fighting for?- Brian Moses and Roger Stevens Writing Outcome: Poetry about WWII (in perspective)		
Mathematics	1	2	3	4	5	6
Spring 1	**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 ▪ recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ ▪ 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.			**Statistics** ▪ 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.		

Spring 2	Decimals	Addition and Subtraction
	- recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ - recognise and write decimal equivalents of any number of tenths or hundredths - round decimals with one decimal place to the nearest whole number - 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 - 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.	- 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.

The grid above show all the topics that will be covered during the term, however teachers will vary the order in which the units are taught depending on the needs of the class at the time.

| Science | States of Matter
Working Scientifically: grouping and classifying a variety of different materials; exploring the effect of temperature on substances. Research the temperature at which materials change state; observe and record evaporation over a period of time.

P.O.S: States of Matter
http://easyscienceforkids.com/all-about-states-of-matter/

Sound
Work Scientifically: finding patterns in the sounds that are made by different objects; investigate which material provides the best insulation against sound.

P.O.S: Sound

Key Scientists: Hermann Ludwig Ferdinand von Helmholtz
http://www.sound-physics.com/Biography/Helmholtz/
(Came up with theories that have led to our understanding of 'accoustics' and 'volume' – consider his contribution and how important these concepts are to many of the things we now do) | Computing | Spring 1: Multimedia & Word processing
Word Processing: Word & Publisher (using a wide range of tools and integrating other online resources: hyper linking to appropriate websites, embedding content, acknowledging sources.

Touch typing (using 2 hands to type)

Using different templates for different genres, e.g. newspaper (LGfL J2Easy J2e5, Publisher

Link with topic:
Pre lesson concentration on keyboard skills :2 Type
Creating a presentation about World War II. Publish on blog. Pupils respond (J2e5 2Webby).
Spring 2: Communication & Collaboration
Online publishing: creating and commenting on each other's blogs/work (See planning)

Online research: use search technologies effectively including search tools, e.g. searching maps/images

Complete an online quiz or survey, e.g. LGFL e-safety survey
Link with topic:
Refining online search as part of topic research.
Using Google Earth to create a tour. 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)- *(Link to Shakleton's journey* |

History	A local history study – Second World War Examples: • a depth study linked to one of the British areas of study listed above • a study over time tracing how several aspects national history are reflected in the locality (this can go beyond 1066) • a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality. SMSC Themes (continue themes around leadership) • The treatment of Jewish people during WW2 (lessons from History) • Was Hitler a 'good' leader? Was Hitler an 'effective' leader? (Is there a difference?). Why did people follow him? • Was everyone in Germany during world war II evil/bad for following Hitler? • Good vs. evil. Standing up for what you believe in. Ghandi.	Geography	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 *(Linking to countries that participated in WW2)* 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 Use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies *SMSC Themes* • *How has London changed since WW2 – religions, people, migration? (Celebrating Diversity)* • *Migration to Europe*
Religious Education	- Special Books and Stories - Prayer and Worship - Food and Light	**Physical Education**	Gymnastics (SCIS) Invasion games (SCIS) Swim (Spring 2 - Every other Friday)
Art and Design	Artist: Bruno Bobak Still Life – drawing and painting	**Design and Technology**	Design, make and evaluate: World War II shelter *SMSC Themes* • *Contrast utility with comfort (ie: the purpose of shelter / the purpose of home)* • *The importance of morale (and resilience) in difficult times! (link to School creed)*
MFL	Spanish	**Music**	Music objectives taught, refined and revisited throughout the year. See 'Autumn 1' for objectives. Instrumental Tuition: Recorders
P.S.H.E	Drugs, Alcohol, Tobacco Education: Making Choices	**School trips and Educational Visits**	London Metropolitan Archives: Children on the Blitz Imperial War Museum • *Social: Importance of record keeping to understand our heritage.* • *Experiences of evacuees – how we learn lessons from history to help us to understand the world today.*

Winton Primary School

Topic Theme:	Food, Glorious Food						
English	1	2	3	4	5	6	7
Summer 1	Book: Cookery Books Writing Outcomes: Creating their own food product (including recipe) – Dragon's Den *SMSC Themes* • *Cultural - Food by culture and links to celebration. Eating together – as a community experience (when do we do this?)* • *Spiritual – Food in religion (bread and wine); sugary water in Sikhism*			Book: How did that get into my lunchbox – Chris Butterworth Until I met Dudley? – Roger McGough and Chris Riddell Writing Outcomes: Explanation text – describing the food manufacturing process *SMSC Themes* • *Deforestation/Land use/ Pollution* • *Changes in farming – links between society and change* • *Where do we source our food from? – Condition for those growing the food? Fair trade?* • *How often do we think about what we buy? Should we think about what we buy?*			
Summer 2	Book: Oliver Twist and Other Great Dickens Stories – Marcia Williams Film: Oliver Twist Writing outcomes: To write a play script SMSC Themes • *Human rights and living conditions. Treatment of others* • *Change in women's rights suffragettes, women voting.* • *Would we allow people to be treated in that way now? Why? (Link to values, rule of law, social expectations).* • *Are there any groups of people in society now that could be treated better and more fairly?*			Book: Selection of comic strips Writing Outcome: Comic strip about Healthy Eating *SMSC Themes* • *Who are heroes?* • *Everyday heroes*		Review, Consolidate, address misconceptions, deepen learning.	
Mathematics	1	2	3	4	5	6	7
Summer 1	**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 ▪ 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.			**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. ▪ 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.			
Summer 2	Performance Week	Review, Consolidate, address misconceptions, deepen learning.					

The grid above show all the topics that will be covered during the term, however teachers will vary the order in which the units are taught depending on the needs of the class at the time.

Science	Working Scientifically: using and making simple guides or keys to explore and identify local plants and animals; raising and answering questions based on observations P.O.S: Living Things and their habitats Key Scientists: Aristotle *SMSC Themes: Social responsibility* • *How we treat animals, RSPCA, organisations that help others in society* • *Positive and Negative impacts of humans on the environment.* • *How to reduce our carbon footprint*	Computing	**Summer 1: Digital Media** Graphics: Creating digital artwork portfolio and interactive webpages for blog (J2e5 on LGfL) Video: Using stock video re-edit footage to create own presentation, insert captured footage. Espresso , Movie Maker Music/Sound: Radio Programme project (listen, evaluate, plan and write a script. Rehearse and record voice. Create and add backing track and sound effects.) Garageband, Audacity, Audio Network Creating a radio programme to preform play scripts. (Audacity and LGfL Audio Network) **Summer 2: Data** Design and collect information for a simple questionnaire Collect data and present in a variety of formats, e.g. 2Purplemash Calculate 2graph, Excel. Design and create a database Use database to carryout complex searches to answer questions (Purplemash 2Simple – 2Investigate, open) Science e.g. sort what material is this? Link with topic: Maths statistics project (Excel) Creating a complex branching database based on local plants and animals.
History		**Geography**	Types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
Religious Education	- Water and Symbols - Caring for Our World	**Physical Education**	Athletics & movement skills, including preparation for sports day (SCIS) Fielding/striking games (SCIS) Swim (every other Friday)
Art and Design	Pointillism	**Design and Technology**	Design, make and evaluate their own tetra pack
M.F.L.	Spanish	**Music**	Music objectives taught, refined and revisited throughout the year. See 'Autumn 1' for objectives. Instrumental Tuition: Recorders
P.S.H.E	Sex and Relationships Education: Growing Up Healthy Living: Making healthy choices Financial Education Outcomes: • Becoming a Critical Consumer • Choices about spending: 1/2/3 • Spending and Saving Priorities 1/2/3	**School trips and Educational Visits**	Farm Visit - Full day visit to farm outside of London Camley Street Nature Reserve