Clockhouse Primary School
Year 5 Curriculum Overview

TERM	AUTUMN TERM		SPRING TERM		SUMMER TERM	
THEME	**Around the Mediterranean in 80 days (Mountains)**		**From Earth to the Moon.**		**A Journey to the Centre of the Victorian Empire.**	
QUESTION / SCENARIO	*Why were the Romans such effective invaders and settlers?*		*How did the Maya Empire grow so strong despite the odds against them?*		*How influential was the Victorian era?*	
STUNNING STARTER	Roman Day – Portals to the past Portals of the past to visit the school and immerse the children in the Roman Lifestyle.		Inflatable Planetarium experience with a scientist		Trip to Havering Museum with the focus on local Victorian history.	
MARVELLOUS MIDDLE	Geography focus - Children to create their own topography maps using paper mache. - Children to explore contour line.		- Children create the phases of the moons with Oreos. - Chocolate making workshop linked with Mayan History. - Create Mayan masks.		- Design and build Victorian style houses. - Role play a Victorian school day. - Design and create a Victorian toy (zoetrope, spinning top, thaumatrope). - Jack the Ripper murder mystery challenge. Select a teacher to be the criminal and set clues and crime scenes around the school – Link to science forensic lesson	
FABULOUS FINISH	European Christmas Market – Children to create Christmas decorations and different things to sell or show at a Christmas Market. Alongside this, they could showcase their work from the term. – Maybe link with OCA?		Children to look at space now and how in the future they hope for humans to be able to live on Mars. - Children to design and create the 1st colony on Mars. Thinking about agriculture, water, homes, oxygen, gravity and economy.		Industrial Revolution: - World fair exhibition. Children to make their own inventions and showcase them at a school exhibition. They could create presentations about their invention and fact files. (Parents come to visit).	
POSSIBLE VISITS / VISITORS	Portals to the past		Inflatable Planetarium experience Chocolate making workshop Frameless Art Exhibition Barclays Bank HQ Residential to Condover Hall Blits Hill (Victorian Village)		Havering Museum	
ENGLISH	<u>Core Text</u> Queen of Darkness: Boudica's army will rise… by Tony Bradman	<u>Core Text</u> Journey to Jo'burg by Beverley Naidoo	<u>Core Text</u> The Firebird by Saviour Pirotta	<u>Core Text</u> Macbeth by William Shakespeare	<u>Core Text</u> The Vanishing Trick By Jenni Spangler	<u>Core Text</u> The Way Home by Libby Hathorn
	<u>Genres Covered</u> Diary Entry Rallying Speech Narrative	<u>Genres Covered</u> Debate Recount Informal Letter	<u>Genres Covered</u> Setting Description Informal Letter Persuasive Dialogue Newspaper Report	<u>Genres Covered</u> Character Description ~ Narrative Non-Chronological Report	<u>Genres Covered</u> Fairy Tale Internal Monologue Diary Entry Instructions	<u>Genres Covered</u> Setting Description Action Scene Recount Poetry Infromation Report
MATHS	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000					

Add and subtract numbers mentally with increasingly large numbers
Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
Establish whether a number up to 100 is prime and recall prime numbers up to 19
Multiply and divide numbers mentally drawing upon known facts

Place value
Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000

Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000

Solve number problems and practical problems that involve all of the above

Addition and subtraction
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

Add and subtract numbers mentally with increasingly large numbers

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

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

Multiplication and division
Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers

Establish whether a number up to 100 is prime and recall prime numbers up to 19

Number- fractions
Compare and order fractions whose denominators are all multiples of the same number

Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

Read and write decimal numbers as fractions [for example, 0.71 =71/100]

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents

Round decimals with two decimal places to the nearest whole number and to one decimal place

Read, write, order and compare numbers with up to three decimal places

Solve problems involving number up to three decimal places

Recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal.

Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

Geometry- properties of shape
Identify 3-D shapes, including cubes and other cuboids, from 2-D representations

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

Draw given angles, and measure them in degrees (o)
Identify:
* angles at a point and one whole turn (total 360o)
* angles at a point on a straight line and a turn (total 180o)
* other multiples of 90o

Statistics
Solve comparison, sum and difference problems using information presented in a line graph

Complete, read and interpret information in tables, including timetables

Place value
Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Addition and subtraction
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

Multiplication and division
Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

Multiply and divide numbers mentally drawing upon known facts

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Measurement
Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)

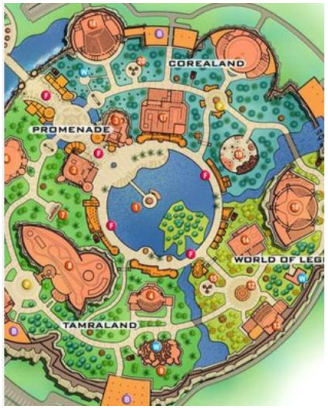
Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Real life/enterprise style maths:

	Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context Multiply and divide numbers mentally drawing upon known facts Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates **Measurement** Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints **Number- fractions** Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example,2/5 + 4/5 = 6/5 = 1 1/5] Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams **Real life/enterprise style maths:**	Use the properties of rectangles to deduce related facts and find missing lengths and angles Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. **Geometry- position and direction** Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. **Measurement** Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. **Problem Solving Task:** **Shape & Measure** Where are they?	Rationing linked to Victorian era **Problem Solving Task:** **Open Ended** How many chairs

	Christmas Market- sell their moving toys to raise money for an area of need. **Problem Solving Task:** **Investigation** Bus stop division investigation					
SCIENCE	**Properties and changes of materials and Forces**		**Earth and space**		**All Living things and their habitats**	
COMPUTING	**Computing Systems and Networks: Search Engines** **Online Safety** To be aware that not everything online is true. Understand the terms copyright and fair use	**Presentation Skills** **Online Safety** To understand how apps can access our personal information and how to alter the permissions	**Coding: Speed, Direction and Coordinates** **Online Safety** To be aware of the positive and negative aspects of online communication To discover ways to overcome bullying		**Creating media – Introduction to vector graphics** **Online Safety** To understand how online information can be used to form judgements	**Coding: Random Numbers and Simulations** **Online Safety** To understand how technology can affect health and wellbeing
HISTORY	**Roman Britain** Considering why the Roamns invaded Britain, the influences they had and rebellions against them.		**The Ancient Maya** Looking at life in The Maya and considering how civilization flourished in such challenging conditions.		**The Victorians** Discovering the social impact that the Victorians had on British society.	
GEOGRAPHY	**Mountains** *Discovering how mountains are formed, developing map reading skills to navigate mountains in Britain and learning about the significance of topography.*		**Linked to the Ancient Maya** Looking at the physical features of the are that the Mayans had to contend with.		**Linked to the Victorians** **<u>Using historic maps and fieldwork to discover evidence of the Victorian period in the local area.</u>**	
ART AND DESIGN	**Drawing / Painting / Sculpture** **Architect**: Friedensreich Hundertwasser Antoni Gaudi **Skill**: 2-Point Perspective		**Drawing / Painting / Sculpture** **Artists**: Calixte Dakpogan, Jozef Mrva, Bertjan Pot **Skill:** Face proportions		**Drawing / Painting / Printing** **Designer:** William Morris	
DESIGN AND TECHNOLOGY	**Mechanisms** Moving toys		**Computer-aided design** Digital World: Monitoring devices		**Cooking and Nutrition** From farm to fork	
RELIGIOUS EDUCATION	2.11What do different people believe about God?	2.19 What does it mean to be a Muslim?	2.13 Why is prayer important for religious believers?	2.18 What does it mean to be a Christian?	2.17 Justice and poverty: Can religions help to build a fair world?	2.12 Why are sources of wisdom important to religious people?
PHYSICAL EDUCATION	**<u>Swimming x 1 class (Japan)</u>** Swim competently, confidently and proficiently over a distance of at least 25 meters Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] Perform safe self-rescue in different water-based situations **<u>Autumn 1</u>** Invasion Game - Basketball (All)		**<u>Swimming x 1 class (China)</u>** Swim competently, confidently and proficiently over a distance of at least 25 meters Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] Perform safe self-rescue in different water-based situations **<u>Spring 1</u>** Invasion: Football (All)		**<u>Swimming x 1 class (India)</u>** Swim competently, confidently and proficiently over a distance of at least 25 meters Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] Perform safe self-rescue in different water-based situations **<u>Summer 1</u>** Net and Wall - Tennis (All)	

	China and India: Dance **<u>Autumn 2</u>** Invasion - Hockey (All) China and India: Yoga		Japan and India: Gymnastics **<u>Spring 2</u>** Science: Fitness (All) Japan:Dance India: Striking and Fielding:Cricket		Japan: Yoga China: Gymnastics **<u>Summer 2</u>** Athletics (All) Japan and China: Striking and Fielding: Cricket	
MUSIC	**<u>Sing Up</u>** **What shall we do with the drunken sailor** (Listening / Singing / Playing /Composing) ***Christmas Songs*** (Singing)		**<u>Sing Up</u>** **Madina tun nabi** (Listening / Singing / Playing /Composing)		**<u>Sing Up</u>** **Kis nay banaayaa** (Listening / Singing / Playing /Composing) ***End of Year Assembly*** (Singing)	
PSHE	**Relationships: Managing friendships and peer influences** Character Education Lesson-Teamwork	**Living in the Wider World: Responding respectfully to a wide range of people and showing compassion to others.** Character Education Lesson-Community	**Living in the Wider World: Attitudes to Spending and Saving Money** **Shopping online.** Character Education Lesson- Values	**Health and Wellbeing: Medicines, Vaccinations and Allergies** Character Education Lesson-Integrity	**Health and Wellbeing: Physical and Emotional Changes During Puberty** **Body Image** Character Education Lesson-Self-Awareness	**Living in the Wider World: Identifying Job Interests and Future Aspirations.** **Health and Wellbeing: Managing Transition** Character Education Lesson-Resilience
LIFE SKILLS	To learn how to swim (Japan) To learn how to use a Chromebook		To learn how to swim (China) To learn how to pack a suitcase		To learn how to swim (India) To read and follow a street map.	
PRIMARY LANGUAGES	**<u>Unit 13 – Bon appetite, bonne sante (Healthy eating)</u>** Packed lunch Food likes and dislikes Celebrations Food for a celebration Pizza Time	**<u>Unit 14 – Je suis le musician (I am the Music Man)</u>** I am the Music Man Expressing opinions Buying a CD It's a rap Music contest	**<u>Unit 15 – En route pour l'ecole (On the way to school)</u>** Alphabet Features in locality Journey to school Following directions Journey times	**<u>Unit 16 – Scene de Plage (Beach scene)</u>** French artists Beach scene Bringing a picture to life Writing a description Paint a picture	**<u>Unit 17 – Les quatres saisons (The four seasons)</u>** Weather and Seasons Months and seasons The myth of Persephone Conscience Alley Preparing a performance	**<u>Unit 18 – Les planets (The planets)</u>** Introducing the planets Describing the planets Writing about a planet Making compound sentences Making a display or class book
HOME RESEARCH PROJECTS	Research theme parks and attractions. Design a theme park that tourists could visit whilst on holiday in the Mediterranean and create an information pack for it Create a 3D model or drawing of a theme park. Example:		Create a poster/presentation about the Royal Observatory Create a Space Quiz to share with your friends based around the information you have learnt about space. Research about the moon or the planets including the size and shape. Create models of this.		Research an area of interest and present in a way of your choice: Research a famous Victorian figure – Queen Victoria, Charles Dickens, Isambard Brunel, Doctor Barnardo, Alexander Graham Bell Research crime and punishment for adults or children who didn't follow the rules. Create a 'Police report' outlining the different crimes and punishment or a 'Horrible Histories' comic strip outlining the crime and punishment in the Victorian era.	

	 Learn about and look at recipes of food from a country in the Mediterranean and have a go at making one or two! Make sure you take photos so that we can see what you made too. Create a holiday brochure or video based on a country in the Mediterranean. You will need to research about the country and what it is like, things to do and other areas such as tourist attractions, food. As part of the project, there will be a focus on the Romans. Create a project based on this around an area of Roman	  Imagine you are going to the moon. Research different types of rockets and what power is needed in order to get to Space. Create your own rocket to attach to your back.	 What was it like in a Victorian home or a workhouse? Create a model of an example of a room using a shoe box. Research about Victorian toys and games or an invention (trains) and create an example of this.
Note where specific objectives are not referenced above, refer to the National Curriculum or related documents			