

Year 6: Autumn 1

## **Topic Title: Titanic**

#### **Science**

- 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.
- Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. I can explain 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 by filtering, sieving and evaporating.
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood
- 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
- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram

#### Working scientifically

- Plan different types of scientific enquiries to answer their own or others questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Use test results to make predictions to set up further comparative and fair tests.	
Real P.E.	Games
FUNS 10 and 1	Football
D.T.	R.E.
<ul> <li>Use research he/she has done into famous designers and inventors to inform the design of his/her own innovative products</li> <li>Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross -sectional and exploded diagrams, prototypes, pattern pieces and computeraided design</li> </ul>	Yom-Kippur / Diwali     Explain how religious beliefs and ideas influence practices and lifestyles and explore how these beliefs and ideas lead to diverse practice, both within and between religions     Express with increasing discernment their personal reflections and critical responses to questions and teachings about identity, diversity, meaning and value
Art	
<ul> <li>Select ideas based on first hand observations, experience or imagination and develop these through open ended research.</li> <li>Refine his/her use of learnt techniques.</li> <li>Observational drawing: refine use of shape, proportion, texture, shading,</li> </ul>	
Computing	Music
<ul> <li>Use technology respectfully and responsibly</li> <li>Identify a range of ways to report concerns about content and contact in and out of school</li> </ul>	Not taught in this term
P.S.H.E.	M.F.L.
<ul> <li>Aspiration</li> <li>Race and Ethnicity – UnitedStates?</li> <li>Gender Stereotypes – Jobs 4 All</li> <li>Culture – Cultural Feast</li> </ul>	<ul> <li>Understand longer and more challenging texts on a range of topic areas, recognising some details and opinions heard</li> <li>Apply knowledge of phonemes and spelling to attempt the reading of unfamiliar words</li> </ul>

## Geography

- 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 his/her knowledge of the United Kingdom and the wider world
- 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)

- Make confident use of a variety of sources for independent research
- Understand how our knowledge of the past is constructed from a range of sources
- · Address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance
- Describe a chronologically secure knowledge and understanding of British history
- Describe a study of an aspect or theme in British history that extends his/her chronological knowledge beyond 1066
- Use dates to order and place events on a timeline
- Compare sources of information available for the study of different times in the past
- Make comparisons between aspects of periods of history and the present day
- Understand that the type of information available depends on the period of time studied
- Evaluate the usefulness of a variety of sources
- Provide an account of a historical event based on more than one source.
- Give some reasons for some important historical events

## **Topic Title: Titanic**

### **Science**

- 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.

#### **Working Scientifically**

- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
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line graphs.	
Real P.E.	Games
FUNS 6 and 2	Basketball
<ul> <li>Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities</li> <li>Art</li> <li>Adapt his/her own final work following feedback or discussion based on their preparatory ideas.</li> <li>Describe the work and ideas of various artists, architects and designers, using appropriate vocabulary and referring to historical and cultural contexts.</li> <li>Develop control of paint</li> </ul>	<ul> <li>R.E.</li> <li>Five Pillars of Islam/ Ten Commandments</li> <li>Begin to use some philosophical language and an increasingly wide religious and moral vocabulary to explore and suggest some reasons for the similarities and differences in beliefs and teachings, both within and between religions</li> <li>Explore and suggest reasons for his/her own and other people's views, including religious ideas about human identity and experience</li> <li>Find out about and investigate key concepts and questions of belonging, meaning, purpose and truth, responding creatively</li> </ul>
<ul> <li>Computing</li> <li>Be discerning when evaluating digital content</li> <li>Use filters in search technologies effectively and is discerning when evaluating digital content</li> <li>Design, input and test an increasingly complex set of instructions to a program or device</li> <li>Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated</li> <li>Design write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user</li> <li>Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency</li> </ul>	Music Not taught in this term
P.S.H.E.  Respect  Mutual Respect  Individual Liberty  Physical, Emotional and Mental — 3-Dimensional	<ul> <li>M.F.L.</li> <li>Engage in longer conversations, asking for clarification when necessary</li> <li>Create his/her own sentences using knowledge of basic sentence structure</li> </ul>

# 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
- 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 pronunciation and intonation effectively to accurately

express meaning and engage an audience

- Construct informed responses that involve thoughtful selection and organisation of relevant historical information
- Use evidence to support arguments
- Describe Britain's settlement by Anglo-Saxons and Scots
- Describe the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor

Year 6: Spring 1

## **Topic Title: Evolution**

### **Science**

- Report and present 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. Identify scientific evidence that has been used to support
  or refute ideas or arguments.
- Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources.
- Group and classify things and recognise patterns.
- Give reasons for classifying plants and animals based on specific characteristics
- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- Find things out using a wide range of secondary sources of information.
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Describe the life process of reproduction in some plants and animals.
- . Describe the ways in which nutrients and water are transported within animals, including humans
- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents Working scientifically
- Plan different types of scientific enquiries to answer their own or others questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Use test results to make predictions to set up further comparative and fair tests.

#### Real P.E. Games **Dance & Gymnastics** FUNS 5 and 4 R.E. D.T. Holy / Sacred Books Confidently plan a series of healthy meals based on the principles of a healthy and varied diet Explain the reasons for diverse forms of expression in religious Use information on food labels to inform choices teachings, including sacred texts, both within and between religions Enquire into what enables different communities to live together Research, plan and prepare and cook a savoury dish, applying his/her knowledge of ingredients and respectfully for the well-being of all his/her technical skills Art Begin to develop an awareness of composition, scale and proportion in their work. Use simple perspective in their work using a single focal point and horizon. Music Computing Include use of sequences, selection and repetition Play and perform in solo or ensemble contexts with increasing accuracy, with the hardware used to explore real world control, fluency and expression systems Solves problems by decomposing them into smaller parts P.S.H.E. M.F.L. Tolerance of those of other faiths Read aloud and understand a short text containing unfamiliar words, using accurate pronunciation Resilience Attempt to read a range of texts independently, using different Independence Physical, Emotional and Mental – What's Puberty? strategies to make meaning **Healthy Lifestyles – You Choose!** Use vocabulary learnt from reading in different contexts and use dictionaries to find a wide range of words **Physical Contact – Touch Sensitive**

### 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
- Describe and understand key aspects of 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

- Note connections, contrasts and trends over time and show developing appropriate use of historical terms
- Use evidence to support arguments

## **Topic Title: Evolution**

### **Science**

- Describe the changes as humans develop into old age.
- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
- Describe the life process of reproduction in some plants and animals.

#### Working scientifically

- Report and present 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. Identify scientific evidence that has been used to support or refute ideas or arguments.
- Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources.
- Group and classify things and recognise patterns.
- Find things out using a wide range of secondary sources of information.

Real P.E.	Games
FUNS 9 and 7	Badminton
Use techniques, colours, tones and effects in an appropriate way to represent things seen - brushstrokes following the direction of the grass, stippling to paint sand, watercolour bleeds to show clouds.	<ul> <li>R.E.</li> <li>What happens when we die? Life after death</li> <li>Explain, with reasons, religious views about moral and ethical issues and explore his/her own views and those of others in relation to these issues</li> <li>Explain reasonably their ideas about how beliefs, practices and forms of expression influence individuals and communities.</li> </ul>
Computing	Music
Create programs which use variables	Create a simple composition and record using formal notation
P.S.H.E.	M.F.L.
Core Theme 2 Unit 4 LESSON 2: Support and Care - Connections	Not taught in this term
Geography	
Not taught in this term	
History	
пізсогу	

## **Topic Title: Ancient Greeks**

### Science

- 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.
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- . Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Recognise that light appears to travel in straight lines

### **Working scientifically**

• Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings.

Real P.E.	Games
FUNS 8 and 12	Tag Rugby
<ul> <li>Use technical knowledge accurate skills to problem solve during the making process</li> <li>Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made</li> <li>Art</li> <li>Produce intricate patterns and textures in a malleable media</li> <li>I can produce intricate patterns in a malleable media.</li> </ul>	R.E.  Greek Gods  Identify and describe similarities and differences in religious practices and lifestyles both within and between religions  Identify, investigate and respond to questions  posed by, and responses offered by, some of the sources of wisdom found in religions and worldviews
<ul> <li>I can produce intricate patterns in a maileable media.</li> <li>Use different techniques, colours and textures when designing and making pieces of work and explain his/her choices.</li> <li>Create intricate printing patterns by simplifying and modifying sketchbook designs.</li> <li>Follow a design brief to achieve an effect for a particular function.</li> <li>Explain and justify preferences towards different</li> </ul>	
Computing	Music
<ul> <li>Use variables, sequence, selection, and repetition in programs</li> <li>Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently</li> </ul>	<ul> <li>Deepen an understanding and use of formal, written notation which includes staff, semibreves and dotted crotchets</li> <li>Improvise and compose music for a range of purposes using the inter-related dimensions of music</li> </ul>
P.S.H.E.	M.F.L.
<ul> <li>Working Together</li> <li>Democracy</li> <li>The Rule of Law</li> <li>Budgeting – Money Supermarket</li> <li>Consumer Sense – PaymentTerms</li> <li>Consumer Sense – A Class Catalogue!</li> </ul>	<ul> <li>Know how to conjugate a range of high frequency verbs</li> <li>Understand how to use some adverbs in sentences</li> <li>Have an awareness of similarities and differences in grammar between different languages</li> </ul>

## Geography

- Describe a study of Ancient Greek life and achievements and their influence on the western world
- 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

- Make confident use of a variety of sources for independent research
- Describe changes in Britain from the Stone Age to the Iron Age
- Describe the Roman Empire and its impact on Britain
- Understand how our knowledge of the past is constructed from a range of sources
- · Construct informed responses that involve thoughtful selection and organisation of relevant historical information
- Address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance
- Use evidence to support arguments
- Describe a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods he/she studies.

## **Topic Title: Ancient Greeks/Transition**

### **Science**

- 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.
- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

#### Working scientifically

 Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings.

Real P.E.	Games
FUNS 11 and 3	Athletics/Swimming (tbc)
<ul> <li>Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately</li> <li>Apply his/her understanding of computing to program, monitor and control his/her product</li> </ul>	<ul> <li>R.E.</li> <li>Good Samaritan</li> <li>Explain his/her own philosophical, moral and/or religious responses to a range of ultimate questions and explore the views of others including different religious perspectives</li> <li>Articulate beliefs, values and commitments clearly in order to explain reasons why they may be important in their own and other people's lives</li> </ul>
Computing	Music
Be discerning when evaluating digital content     Use filters in search technologies effectively and is discerning when evaluating digital content	<ul> <li>Develop a deeper understanding of the history and context of music</li> <li>Appropriately discuss the dimensions of music and recognise them in music heard</li> <li>Listen with attention to detail and recall sounds with increasing aural memory and accuracy</li> <li>Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians</li> <li>Understand how pulse, rhythm and pitch work together</li> <li>Sing as part of an ensemble with full confidence and precision</li> </ul>
P.S.H.E.	M.F.L.
<ul> <li>All 5 Root Values</li> <li>British Values</li> <li>Generating Income – Making Money</li> <li>Generating Income – Raising Money</li> </ul>	<ul> <li>Write a range of phrases and sentences from memory and adapt them to write his/her own sentences on a similar topic</li> <li>Select appropriate adjectives to describe a range of things, people and places and appropriate verbs to describe actions</li> <li>Begin to use some adverbs</li> </ul>

## Geography

- 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
- Understand and use a widening range of geographical terms e.g. specific topic vocabulary urban, rural, land use, sustainability, tributary, trade links etc.
- Use maps, charts etc. to support decision making about the location of places e.g. new bypass

- Describe a local history study
- Describe 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
- Describe 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