

Year Six Curriculum Map

Spring Term

Mathematics

Decimals and Percentages

Associate fraction with division and calculate decimal fraction equivalents.

Identify the value of each digit in numbers to 3 decimal places.

Multiply and divide numbers by 10,100 and 1000 given answers to 3 decimal places.

Multiply 1-digit numbers with up to 2 decimal places by whole numbers.

Use written division where the answer has up to 2 decimal places.

Solve problems which require answers to be rounded.

Recall equivalences between fractions, decimals and percentages and use these in different contexts

Algebra

Use simple formulae.

Generate and describe linear number sequences.

Express missing number problems algebraically.

Find pairs of numbers to satisfy equations.

Measurement: Converting Units

Use, read, write and convert between standard units. (length, mass, volume and time).

Solve problems involving the calculation and conversion of units of measure

Convert between miles and kilometres.

Measurement: Perimeter, Area and Volume

Recognise that shapes with the same areas can have the same perimeter and vice versa.

Calculate the area of triangles and parallelograms.

Use formula to calculate area and volume of shapes.

Calculate, estimate and compare volumes of cubes and cuboids.

Ratio and Proportion

Solve problems involving the calculation relative size of two quantities.

Solve problems involving the calculation of percentages and use the percentage for comparison.

Solve problems involving similar shapes where scale factor is known.

Reading

Key Text: Shackleton's Journey by William Grill

Key Text: Extract from Northern Lights (also by Philip Pullman)

Key Text: The Lost Thing by Shaun Tan

Writing

Writing a narrative opening.

Writing a formal letter of application.

Writing an eyewitness account of the resurrection of Jesus (R.E).

	Non Fiction: Writing a biography of Ernest Shackleton. Writing an information text about the polar regions (Geography). Write a persuasive text about the Antarctic including a setting description. (Geography) To write a narrative.
--	---

RE	
Skills	Knowledge
Why do Hindus try to be Good? (SACRE unit) The unit enables pupils to develop: • Spiritually by: learning about and reflecting on their own and others' beliefs about life, death and meaning. • Morally by: expressing their own ideas about the meaning and purposes of life and the choices people make, including in the pupils' own experience. • Socially by: considering how different people express what matters to them in different ways. • Culturally by: promoting respect for all, understanding important ideas from Hindu worldviews. <u>Salvation</u>	Why do Hindus try to be Good? (SACRE unit) What are key features of Hindu religion? Using terms correctly, including the concepts of Brahman (ultimate reality), Karma (a way of life), Dharma (duties), Samsara (the cycle of birth and reincarnation) and Moksha (liberation or freedom). Salvation Christians read the 'big story' of the Bible as pointing out the need for God to save people. This salvation includes the ongoing restoration of humans' relationship with God. The Gospels give accounts of Jesus' death and resurrection. Belief in Jesus' resurrection confirms to Christians that Jesus is the incarnate Son of God, but also that death is not the end. This belief gives Christians hope for life with God, starting now and continuing in a new life (heaven).

Suggest meanings for resurrection accounts, and compare their ideas with ways in which Christians interpret these texts, showing awareness of the centrality of the Christian belief in Resurrection. Make clear connections between Christian belief in the Resurrection and how Christians worship on Good Friday and Easter Sunday. Show how Christians put their beliefs into practice in different ways. Explain why some people find belief in the Resurrection makes sense and inspires them. Offer and justify their own responses as to what difference belief in Resurrection might make to how people respond to challenges and	
Science	
Working scientifically Comment on how the idea that Jesus is the Messiah makes sense in the wider story of the Bible. Weigh up how far the idea that Jesus is the Messiah — a Saviour from God — is important in the world today and, if it is, how it is important.	Knowledge
Living Things and Their Habitats Classify living things, including microorganisms, animals and plants, into groups according to common observable characteristics and based on similarities and difference.	Living Things and Their Habitats Scientists classify living organisms into broad groups according to their characteristics. Vertebrates are an example of a classification group. There are a number of ranks, or levels, within the biological classification system. The first rank is called a kingdom, the second a phylum, then class, order, family, genus and species.
Identify how animals and plants are adapted to suit their environment, such as giraffes having long necks for feeding, and that adaptations may lead to evolution. Plan and carry out a range of enquiries, including writing methods, identifying and controllable variable, decoding on equipment and data to collect and make predictions based on prior knowledge and understanding. Research unfamiliar animals and plants from a range of habitats, deciding upon and explaining where they belong in the classification system. Use and construct classification systems to identify animals and plants from a range of habitats.	Vertebrates, or chordates, can be subdivided into five groups: amphibians, birds, fish, mammals and reptiles. An adaptation is a physical or behavioural trait that allows a living thing to survive and fill an ecological niche. Adaptations evolve by natural selection. Living things are classified into groups, according to common observable characteristics and based on similarities and differences. Classification keys help us identify living things based on their physical characteristics.

--	--

Geography: Frozen Kingdoms

Geography: Frozen Kingdoms	
Skills	Knowledge
History	
Compare and describe physical features of polar landscapes. Skills Describe the climatic similarities and differences between two regions. Ernest Shackleton Describe the distribution of natural resources in an area or country. Describe some of the significant achievements of mankind and explain how climate change affects climate zones and biomes across the world. Explain how the decisions made by significant historical individuals, considering the facts and making a summative judgement about their choices. Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night). Use grid references, lines of latitude and longitude, contour lines and symbols in maps and on globes to understand and record the geography of an area.	The Polar Regions Knowledge The Earth has two polar regions: the Arctic Circle in the Northern Hemisphere and the Antarctic Circle in the Southern Hemisphere. Specific Knowledge Great achievements within Antarctic exploration include Captain Cook's crossing of the Antarctic Circle, in the 1770s; Captain James Clark Ross' discovery of Mount Erebus, the Ross Sea and the Ross Ice Shelf, and the Expedition to reach the South Pole by Shackleton, Amundsen and Scott, between 1901 and 1916 during the Heroic Age of Antarctic Exploration. Polar landscapes Much of the polar regions is covered with snow and ice all year round. Polar landscape features include glaciers, ice fields and icebergs. Glaciers are slow moving masses of flowing ice formed by the compaction of snow. Icebergs are chunks of ice that have broken off from glaciers and ice sheets and are floating in the sea. Ice fields are large areas of connected glaciers covering flat areas, such as valleys and high plateaus. They are made from compressed and frozen snow. Decisions can be made for a variety of reasons, including belief, lack of options, cultural influences and personal gain. Decisions are influenced by the cultural context of the day, which may be different to the cultural context today, and should be taken into account when making a judgement about the actions of historical individuals. The Arctic and Antarctica
PE	
Skills	Knowledge
Gymnastics To be able to develop the straddle, forward and backward roll. To develop counter balance and counter tension. To be able to perform inverted movements with control. To be able to perform the progressions of a headstand and a cartwheel. To be able to use flight from hands to travel over apparatus. To be able to create a group sequence using formations and apparatus. Handball To develop a variety of passes and know when to use each to help to maintain possession. To use stepping, dribbling and passing skills to create space, move towards goal and away from defenders. To use defending skills to stop an opponent from scoring.	Antarctica does not belong to any country. Physical features typical of the Arctic and Antarctic regions include glaciers, icebergs, ice caps, ice sheets, ice shelves and sea ice. Use knowledge of compositional principles e.g. how to use variations in level, direction and pathway, how to combine and link actions, how to relate to a partner and apparatus, when developing sequences. Build trust when working collaboratively in larger groups, using formations to improve the aesthetics of their performances. To give and receive feedback in order to make improvements on performances. The Arctic landscape and wildlife are at risk due to this change. Scientists are confident that the skill of attacking and defending is the polar wide goal of the game. Dribbling, passing, stepping and shooting are skills with rise in the possession of the ball and the polar regions will be damaged. Confidently defending principles such as gaining possession of the ball, denying space and stopping goals. To work

To select and apply the appropriate skill to score goals. To use defensive skills to gain possession. To maintain possession under pressure.	collaboratively to develop strategies and tactics in both attack and defence. Show understanding of the rules and the importance of fair play and honesty whilst self-managing matches. Improve their ability to evaluate their own and others' performance.
---	---

Art	
Artist: Current Award Winning Photographers	Art form: Photography
Skills	Knowledge
Gather, record and develop information from a range of sources to create a mood board or montage to inform their thinking about a piece of art. Adapt and refine artwork in light of constructive feedback and reflection. Create innovative art that has personal, historic or conceptual meaning.	A mood board is an arrangement of images, materials, text and pictures that can show ideas or concepts. A montage is a set of separate images that are related to each other and placed together to create a single image. Strategies used to provide constructive feedback and reflection in art include using positive statements relating to how the learning intentions have been achieved. In conceptual art, the idea or concept behind a piece of art is more important than the look of the final piece. Environmental art addresses social and political issues relating to the natural and urban environment.

Design Technology	
Area: Monitoring and control	Brief: Designing, making and evaluating an electronic toy moneybox for a child
Skills	Knowledge

Designing • Develop a design specification for a functional product that responds automatically to changes in the environment. • Generate, develop and communicate ideas through discussion, annotated sketches and pictorial representations of electrical circuits or circuit diagrams. Making • Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. • Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product. • Create and modify a computer control program to enable their electrical product to respond to changes in the environment. Evaluating • Continually evaluate and modify the working features of the product to match the initial design specification. • Test the system to demonstrate its effectiveness for the intended user and purpose.	Technical knowledge and understanding • Understand and use electrical systems in their products. • Understand the use of computer control systems in products. • Apply their understanding of computing to program, monitor and control their products. • Know and use technical vocabulary relevant to the project.
---	---

French	
Skills	Knowledge
1. To understand and use the names of places in their local area. 2. To understand and give similar directions. 3. To begin to use the new phrases when speaking to strangers. 4. To produce a guide booklet in French with pictures of the local area to exchange with a French-speaking school. 5. To read longer passages with understanding. 6. To use language creatively.	1.(a) Recognise and respond to the new vocabulary. (b) Pronounce the new words correctly. (c) Label pictures accurately and add the names to the class dictionary. 2.(a) Recognise and use the phrases for asking and giving directions. (b) Practise these orally in role-plays. (c) Listen to understand native French speakers in context. (d) Play games, using the new language confidently. (e) Where possible use ICT to reinforce new language. 3.(a) Greet a greet 'stranger' politely and ask the way. (b) Show understanding by following instructions. 4.(a) Use descriptive language applied to their area. (b) Create display text in French using appropriate layout and graphics. 5.(a) Read with understanding. (b) Use a dictionary to find new words and add these to a word list.

	6.(a) Work in groups or individually to produce a treasure map and instructions for finding treasure. (b) Discover the treasure on a different island, following instructions. (c) Read with understanding.
--	---

Music (Charanga)
Title: You've got a friend
Style: Pop
Theme: The music of Carole King
Performance: Improvisations/Instrumental performances/Compositions

PSHE, Citizenship, Relationships	
Skills	Knowledge
<u>Keeping Safe</u> <u>I can ...</u> - explain why emotional needs are as important as physical needs and what might happen if a person doesn't get their emotional needs met. - explain some ways of making sure that I keep myself safe when using a mobile phone, including safety around sharing personal information or images, and that there are laws relating to this. - explain why some people believe that more young people drink alcohol than actually do (misperceive the norm). <u>Rights and Respect</u>	<u>Keeping Safe</u> <u>Emotional Needs</u> Are emotional needs equally important as physical needs? Why? What might happen if someone's emotional needs are not met? <u>Staying Safe Online</u> Can having a mobile phone be both negative and positive? How? How can someone keep themselves safe when using a mobile phone? Why is there a law about sharing inappropriate images on mobile phones? <u>Drugs: Norms and Risks</u> (Including the Law)

<u>I can ...</u> • explain why people might do this (why they are showing certain aspects of themselves) and how social media can affect how a person feels about themselves. • explain that what 'environmentally sustainable' living means and give an example of how we can live in a more 'sustainable' way. • explain the advantages and disadvantages of different ways of saving money.	Is young people's use of alcohol increasing or decreasing? Will knowing the norms about young people and alcohol, help someone choose not to take part in risky behaviour? Why? <u>Rights and Respect</u> <u>Understanding Media Bias, Including Social Media</u> Does someone's social media profile give a true view of them? Why do people show only certain aspects of themselves? Does social media affect how a person feels about themselves? Does using social media create pressures on people? How? How can someone keep healthy when using social media? <u>Caring: Communities and the Environment</u> What things have an impact on the environment? What is 'sustainable' living? How can we change to live more sustainably? What can someone do to help the environment? <u>Earning and Saving Money</u> What different ways are there to save money? Are there advantages or disadvantages to the different ways to save money, including long-term saving? What is 'interest' when money is saved?
--	--

Skills	Knowledge
<u>Web page creation</u> To explore and review existing websites and evaluate their content. To plan and create own website (including multiple pages and hyperlinks). <u>Data and Information Spreadsheets</u> To collect and organise data into a format of their choice. To format cells in spreadsheets. To construct a formula to produce calculated data.	<u>Web page creation</u> To understand the structure and features of a webpage. To understand 'copyright' and the ownership of images. To understand the term 'navigation path' and why it is needed when creating a website. To understand the importance of evaluating and editing web pages. To explain the implications of linking to content owned by others. <u>Data and Information Spreadsheets</u> To understand how data can be organised into columns and rows to create a data set in a spreadsheet. To know that formulas can be used to produce calculated data.