Playing and Exploring

Creating and Thinking Critically



Curriculum overview Year 6

Key figures

Equality and Justice **Exploring Human Rights**

- Understand developmental rights, participation rights and protection rights
- Explore in depth human rights and responsibilities in a local and

Promoting Equality

- Critically evaluate media coverage of equality and justice issues
- Begin to understand legislation and conventions that prohibit
- Examine an equality issue in relation to a minority e.g. refugees
- Explore an issue in depth e.g. homelessness

Explore Democratic Process

- Understand how democracy works within the school and a wider
- Engage in local issues
- Participate in the democratic process

Activating Equality through positive action

- participate in a human rights climate in class
- express views by writing letters to elected representatives
- develop an anti-racist charter
- learn about people who have made a difference through campaigning and protesting
- actively support fair trade

Belief Systems

- Explore concept of authority as exercised by religious leaders
- Find out how leaders are chosen
- Identify common features which may exist between religious leaders

Rites and Ceremonies

- Learn about rites of passage across societies
- Discuss similarities and difference across major belief systems in respect of rituals and ceremonies
- Identify common links across belief systems with regard to pilgrimages

Celebrations

- Listen to and experience music by religions to celebrate their faith
- Look at and respond to art forms associated with festivals
- Present project work in the form of an assembly or exhibition

Beliefs and Values

- Explore common links in religious codes of conduct
- attempt to locate common values across traditions
- explore how values can benefit society
- visit places of worship

Moral and Spiritual

Exploring Moral Development

- examine benefits of values in the wider community and globally explore interpretations and shades of right and wrong through
- controversial issues
- explore values and develop a personal values charter
- critically question and make informed decisions
- Explore the concept of collective responsibility

Cultivating Spiritual Growth

- identify own personal views and insights and apply to own life
- understand the tradition of meditation as a key aspect of spiritual
- identify places associated with meditative tradition e.g. monastery grow in self-development through opportunities for meditation and

Ethics and the Environment Knowledge and awareness of environmental issues

Be aware of the impact of air, water, waste and pollution on

- the environment Be aware of the power of natural disasters
- Develop an understanding of conservation
- Develop an understanding of interdependence

Responsibility and stewardship

- Participate in environmental project and audit
- Become involved in local community environmental action e.g. litter clearance
- Create wildlife areas
- Engage in planting and seed collection
- Debate environmental issues
- Be aware of controversial nature of some issues
- Research and present work on this through IT, displays etc.

Number - number and place value/ addition, subtraction, multiplication and division

- read, write, order and compare numbers up to 10,000,000 and determine the value of
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across 0
- solve number and practical problems that involve all of the above
- multiply and divide numbers by a two-digit whole number using the formal written methods of long multiplication, short division or long division as appropriate
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the 4
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Number - Fractions (including decimals and percentages)

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions >1
- add and subtract fractions with different denominators and mixed numbers
- multiply simple pairs of proper fractions e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$
- divide proper fractions by whole numbers e.g. $1/3 \div 2 = 1/6$
- associate a fraction with division and calculate decimal fractions for simple fractions
- identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
- multiply one-digit numbers with up to 2 decimal places by whole numbers
- use written division methods
- solve problems which require answers to be rounded
- recall and use equivalences between simple fractions, decimals and percentages

Ratio and proportion

- solve problems involving the relative sizes of 2 quantities where missing values can be found by using multiplication and division facts
- solve problems involving the calculation of percentages
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

Reading - word reading/comprehension

apply their growing knowledge of root words, prefixes and suffixes

Term:

- maintain positive attitudes to reading and an understanding of what they read
- read and discuss an increasingly wide range of genres
- recommend books that they have read to their peers, giving reasons for their choices
- identify and discuss themes and conventions in and across a wide range of writing
- make comparisons within and across books
- learn a wider range of poetry by heart and prepare poems and plays to read aloud and perform

English

- draw inferences and justify inferences with evidence
- predict what might happen from details stated and implied
- identifying how language, structure and presentation contribute to meaning
- distinguish between statements of fact and opinion retrieve, record and present information from non-fiction
- explain and discuss their understanding of what they have read, giving justifications for their views

Writing - transcription/spelling

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters [for example, knight, psalm, solemn]
- continue to distinguish between homophones and other words which are often confused
- use knowledge of morphology and etymology in spelling
- use dictionaries to check the spelling and meaning of words use a thesaurus

Writing — handwriting

- write legibly, fluently and with increasing speed
- decide whether or not to join specific letters

Writing - composition

- plan their writing, identify the audience and purpose of the writing, selecting the appropriate form
- select appropriate grammar and vocabulary
- use a wide range of devices to build cohesion within and across paragraphs
- use organisational and presentational devices to structure a text and to guide the reader
- assess the effectiveness of their own and others' writing

proof read for spelling and punctuation errors

- propose changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- ensure the consistent and correct use of tense throughout a piece of writing ensure correct subject and verb agreement when using singular and plural
- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear

Working scientifically

- plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- take measurements, using a range of scientific equipment, with increasing accuracy and precision
- record data and results of increasing complexity using scientific diagrams, tables and graphs
- use test results to make predictions to set up further comparative and fair tests
- report and present findings from enquiries, including conclusions and explanations identify scientific evidence that has been used to support or refute ideas or arguments

Living things and their habitats

- 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
- give reasons for classifying plants and animals based on specific characteristics

Animals including humans

- identify and name the main parts of the human circulatory system, and describe their functions
- recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- describe the ways in which nutrients and water are transported within animals

Evolution and inheritance

- 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
- identify how animals and plants adapt to their environment and that adaptation may lead to evolution

Light

- recognise that light appears to travel in straight lines
 - use this to explain that objects are seen because they give out or reflect light into the eye
 - use this explain why shadows have the same shape as the objects that cast them

Electricity

- 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

Science

EG Active learning

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Curriculum overview Year 6

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- enumerate possibilities of combinations of 2 variables

Measurement

- solve problems involving the calculation and conversion of units of measure
- use, read, write and convert between standard units of measure, converting measurements from a smaller unit to a larger unit, and vice versa
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units

Geometry - properties of shapes/position and direction

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify shapes based on their properties and sizes and find unknown angles
- illustrate and name parts of circles, including radius, diameter and circumference
- recognise angles and find missing angles
- describe positions on the full coordinate grid (all 4 quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Statistics

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average

Humanities

- History 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
 - the achievements of the earliest civilizations
 - 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

Geography

Locational knowledge

- use maps to locate countries; concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, identifying key geographical features and how these have changed over time

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 in North or South America

Human and physical geography

describe and understand key aspects of physical and human geography

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the 8 points of a compass, grid references, symbols and key 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

Writing - vocabulary, grammar and punctuation

- recognise vocabulary and structures that are appropriate for formal speech and writing, including
- use passive verbs to affect the presentation of information in a sentence
- use the perfect form of verbs to mark relationships of time and cause
- use expanded noun phrases to convey complicated information concisely
- use modal verbs or adverbs to indicate degrees of possibility

Term:

- use relative clauses beginning with who, which, where, when, whose, that or with an implied relative pronoun
- learn the grammar for year 5
- use commas to clarify meaning or avoid ambiguity in writing
- use hyphens to avoid ambiguity
- use brackets, dashes or commas to indicate parenthesis
- use semicolons, colons or dashes to mark boundaries between independent clauses
- use a colon to introduce a list
- punctuate bullet points consistently

Creative Arts

- 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
- 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
- develop an understanding of the history of music

Art and Design

- develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design
- create sketch books to record their observations and use them to review and revisit ideas
- improve their art and design techniques
- learn about great artists, architects and designers in history

Design Technology (DT)

- use research and develop design criteria to inform the design products
- generate, develop, model and communicate own ideas
- select from and use a wider range of tools and equipment to perform practical tasks
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients
- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria
- understand how key events and individuals in design and technology have helped shape the world
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical and electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

Computing

- design, write and debug programs that accomplish specific goals
- use sequence, selection, and repetition in programs
- 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, the services and opportunities they offer for communication and collaboration
- use search technologies effectively
- 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
- use technology safely, respectfully and responsibly

- use running, jumping, throwing and catching in isolation and in combination
- play competitive games, modified where appropriate and apply basic principles suitable for attacking and defending
- develop flexibility, strength, technique, control and balance
- 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

Swimming and water safety

- swim competently, confidently and proficiently over a distance of at least 25 metres
- use a range of strokes effectively
- perform safe self-rescue in different water-based situations

Foreign Language

- listen attentively to spoken language and show understanding by joining in and responding
- explore the patterns and sounds of language engage in conversations
- speak in sentences, using familiar vocabulary, phrases and basic language structures
- develop accurate pronunciation and intonation
- 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
- 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