



Year Group: 6

Term: Autumn 18

School Theme

Discover - Science

Essential Question

Do our hands hold the future?

Authentic Outcome

Dragons Den/
Technology Exhibition

Trips, Experiences & Making Community Links

- Science Museum/Centres
- Apple/MGL (technology links)
- Business managers/entrepreneurs/gym instructors/nutritionists/doctors/vets

RE Curriculum Topics & Additional Links

- Love and honour the Earth and the world in which we live; take care of the environment (stewardship/mission/commitment).
- Love is the same throughout time and across all continents.
- The blessings on Earth and glorious complexities of the world – planets, solar system, galaxies.

Technology

- Use of Class VR headsets and t-shirts for studying the organs inside the human body and “futuristic” scene.
- Use of Seesaw across subjects to build pupils’ online journals.
- Use of iMovie and green screen to trial ‘Read, Write, Perform’ linked to futuristic product created in Design & Technology.

Mini Outcomes

- To create a piece of art work linked to the essential question. E.g. hands holding a jigsaw globe - children each have piece of jigsaw to fill.
- To research and finalise initial plans for futuristic product.
- To print 3D designs of product and prepare portfolios for ‘Dragons Den’ presentation.

Immersive Environment

- Learning Spaces (permanent and moveable furniture)
- Silver tubing/pipes to hang across ceiling
- Time capsule/travelling booth
- Black materials
- Where will the world be in 1000 years? BOARD

Outcomes for this Term/National Curriculum Links and Coverage

Maths	English	REAL Project	RE	Other Subjects
<ul style="list-style-type: none"> - Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit - round any whole number to a required degree of accuracy - solve problems involving addition and subtraction - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why - generate and describe linear number sequences - identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places - use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy - multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication - multiply one-digit numbers with up to two decimal places by whole numbers - divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context - divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context - use written division methods in cases where the answer has up to two decimal places - identify common factors, common multiples and prime numbers - perform mental calculations, including with mixed operations and large numbers - solve problems which require answers to be rounded to specified degrees of accuracy - find pairs of numbers that satisfy an equation with two unknowns - use knowledge of the order of operations to carry out calculations involving the four operations - express missing number problems algebraically - solve problems involving addition, subtraction, multiplication and division - find pairs of numbers that satisfy an equation with two unknowns - use knowledge of the order of operations to carry out calculations involving the four operations - use common factors to simplify fractions; use common multiples to express fractions in the same denomination - compare and order fractions, including fractions $>$ 1 - associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,] - recall and use equivalences between simple fractions and decimals, including in different contexts - generate and describe linear number sequences (with fractions) - add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions - recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. - express missing number problems algebraically - compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons 	<p>Reading</p> <ul style="list-style-type: none"> - recommending books that they have read to their peers, giving reasons for their choices - identifying and discussing themes and conventions in and across a wide range of writing - making comparisons within and across books - learning a wider range of poetry by heart - preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience - checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context - asking questions to improve their understanding - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence - predicting what might happen from details stated and implied - summarising the main ideas drawn from more than 1 paragraph, identifying key details that support the main ideas - identifying how language, structure and presentation contribute to meaning - discuss and evaluate how authors use language, including figurative language, considering the impact on the reader - distinguish between statements of fact and opinion - retrieve, record and present information from non-fiction - participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously - explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary - provide reasoned justifications for their views <p>Writing Pieces (PC & MD)</p> <ul style="list-style-type: none"> - Reflection/Narrative - Explanation - Character/Setting Description - Recount - Non-chronological Report - Persuasive Speech - Biography <p>Writing Basic Skills Coverage</p> <ul style="list-style-type: none"> - recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms - using passive verbs to affect the presentation of information in a sentence - using the perfect form of verbs to mark relationships of time and cause - using expanded noun phrases to convey complicated information concisely - using modal verbs or adverbs to indicate degrees of possibility - using relative clauses beginning with who, which, where, when, whose, that or with an implied (ie omitted) relative pronoun - using commas to clarify meaning or avoid ambiguity in writing - using hyphens to avoid ambiguity - using brackets, dashes or commas to indicate parenthesis - using semicolons, colons or dashes to mark boundaries between independent clauses - using a colon to introduce a list - punctuating bullet points consistently <p>Spelling</p> <ul style="list-style-type: none"> - ible/able - fer - tious/cious - i before e - cial/tial - ough - homophones 1 and 2 <p>Handwriting</p> <ul style="list-style-type: none"> - write legibly, fluently and with increasing speed by: - choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters - choosing the writing implement that is best suited for a task 	<p>Science</p> <p>Evolution</p> <ul style="list-style-type: none"> - 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 - identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution <p>Animals and Humans</p> <ul style="list-style-type: none"> - 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 - describe the ways in which nutrients and water are transported within animals, including humans <p>Living things and their habitats</p> <ul style="list-style-type: none"> - 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 - give reasons for classifying plants and animals based on specific characteristics <p>Design & Technology</p> <ul style="list-style-type: none"> - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design - investigate and analyse a range of existing products - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <p>Art</p> <ul style="list-style-type: none"> - to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] 	<p>Autumn TOPIC 1: DOMESTIC CHURCH– FAMILY: LOVING</p> <p>Learning Outcomes Know and understand:</p> <ul style="list-style-type: none"> • The love and care of people – Explore • God's love is unconditional and never ending – Reveal <p>Acquire the skills of assimilation, celebration and application of the above – Respond</p> <p>Autumn TOPIC 2: BAPTISM/CONFIRMATION – BELONGING: VOCATION & COMMITMENT</p> <p>Learning Outcomes Know and understand:</p> <ul style="list-style-type: none"> • Commitment in life – Explore • The vocation to the priesthood and religious life – Reveal <p>Acquire the skills of assimilation, celebration and application of the above – Respond</p> <p>Autumn TOPIC 3: ADVENT/CHRISTMAS – LOVING: EXPECTATIONS</p> <p>Learning Outcomes Know and understand:</p> <ul style="list-style-type: none"> • The meaning of expectation – Explore • Advent, a time of joyful expectation of Christmas, the Word becoming a human person, Jesus – Reveal <p>Acquire the skills of assimilation, celebration and application of the above – Respond</p>	<p>Computing</p> <ul style="list-style-type: none"> - To explain what coding is. - Introduction to the 2Code interface including the possible actions of character, car and animal objects. - Tinkering with 2Code. - To create a program with an object that repeats actions indefinitely. - To use a timer to make characters repeat actions. - To explore the use of the repeat command and how this differs from the timer. - To introduce If statements to allow selection in a program. - To understand what a variable is in programming. - To use a variable to create a visual timer. - To explore number and string variables. - To go through the design, code, execute, refine process. - To use the coding skills that they have encountered creatively in their own program. - To create a program that controls or simulates a physical system, i.e. changing the speed and angle of moving objects. - To go through the design, code, execute, refine process. - To use the coding skills that they have encountered creatively in their own program. - To create a program that controls or simulates a physical system, i.e. changing the speed and angle of moving objects. - 3D Design and Printing - To review aspects of online safety and make an online safety themed game. - To learn about the safety aspects of blogging. <p>Music</p> <ul style="list-style-type: none"> - 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 using the inter-related dimensions of music - listen with attention to detail and recall sounds with increasing aural memory <p>PE</p> <ul style="list-style-type: none"> - use running, jumping, throwing and catching in isolation and in combination - develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] - compare their performances with previous ones and demonstrate improvement to achieve their personal best – link to discussion about lung capacity, heart rate etc. - take part in outdoor and adventurous activity challenges both individually and within a team (PGL) <p>Spanish –Specialist Teacher PSHE</p>