

Termly Curriculum Planning

Year 5

Give Me Some Space

Maths

Number and Place Value:

Read, write and order numbers up to 10,000,000

Use negative numbers in context and calculate intervals across zero

Read and recognise Roman Numerals to 1000 including years

Addition and Subtraction:

Add and subtract whole number with more than 4 digits using formal written methods

Add and subtract numbers mentally (increasingly large)

Add and subtract negative integers.

Statistics:

Solve problems using information from graphs.

Complete, read and interpret information from tables.

Interpret and construct pie charts and line graphs.

Calculate and interpret the mean as average.

Multiplication and Division:

Factors, multiples, prime numbers, square and cube numbers.

Multiplying and dividing by 10, 100 and 1000.

Area and Perimeter:

Calculate perimeter and area of composite rectilinear shapes.

Calculate the area of parallelograms and triangles.

Recognise when to use formulae for area of shapes.

Vocabulary

Earth and Space: atmosphere, axis, celestial body, constellations, crescent, eclipse, full moon, gibbous, gravity, Jupiter, lunar, Mars, Mercury, Neptune, orbit, planet, rotate, satellite, Saturn, solar, solar system, sphere, spherical, universe, Uranus, Venus, waxing, waning.

Forces: gravity, air resistance, water resistance, friction, surface, force, accelerate, decelerate, brake, mechanism, pulley, gear, spring, Isaac Newton, Galileo Galilei.

English

Composition:

Identify the audience for writing.

Choose the appropriate form of writing using the main features identified in reading.

Note, develop and research ideas.

Plan, draft, write, edit and improve.

Use the techniques that authors use to create characters, settings and plots.

Ensure correct use of tenses throughout a piece of writing.

Write paragraphs that give the reader a sense of clarity and make sense when read alone.

Write sentences that include: relative clauses, modal verbs, relative pronouns, a clear subject and object and bullet points.

Transcription:

Write fluently and legibly with a personal style.

Spell some words with silent letters (knight, psalm and solemn).

Distinguish between homophones and other words that are often confused.

Use the first three or four letters of a word to look up the meaning or spelling of words in a dictionary.

Use a thesaurus.

Spell the vast majority of words correctly.

Perform compositions, using appropriate intonation and volume.

Reading

Apply knowledge of root words, prefixes and suffixes.

Read age-appropriate books with confidence and fluency

Recommend books to peers, giving reasons for choices.

Identify and discuss themes and conventions in and across a wide range of writing.

Make comparisons within and across books.

Learn a wide range of poetry by heart.

Prepare 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.

Check that the book makes sense, discussing understanding and exploring the meaning of words in context.

Ask questions to improve understanding.

Predict what might happen from details stated and implied.

Summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.

Identify how language, structure and presentation contribute to meaning.

Retrieve and record information from non-fiction.

Participate in discussion about books, taking turns and listening and responding to what others say.

Distinguish between statements of fact and opinion.

Computing

Coding: set IF conditions for movements, change the position of objects between screen layers, upload sounds from a file and edit them, use IF THEN ELSE to control events or objects.

Communicate: choose the most suitable applications and devices for the purposes of communication.

Connect: give examples of the risks of online communities and demonstrate knowledge of how to minimise risk, understand the effect of online comments, understand how simple networks are set up and used, understand and demonstrate knowledge that it is illegal to download copyright material, including music and games without written permissions

PSHE

TEAM: attributes of a good team, communication, collaboration, compromise, care and shared responsibility.

Be Yourself: celebrating difference, sharing thoughts and feelings, uncomfortable feelings, confidence, making choices and making amends.

History – History of inventions and space travel

Use appropriate historical vocabulary to communicate (dates, time period, era, change, century, decade, legacy). Use dates and terms accurately in describing events. Use original ways to present information and ideas.

R.E.

Christianity – are angels real?

- The different views about the nature of knowledge, meaning and existence; Global diversity associated with study of Christianity; The church, worship and festivals; The impact of Christian teachings on daily life, the varying expressions of prayer, cultural expressions of the Christian faith

Christianity and Humanism – What do we mean by a religion? What makes a religion a religion?

- Core knowledge: Different views about the nature of knowledge, meaning and existence; Key vocabulary associated with the study of Christianity; The church, worship and festivals; Humanist core knowledge: The different views about the nature of knowledge, meaning and existence; key vocabulary relating to the study of Humanism as a philosophy or life stance

Art and Design

Collect information, sketches and resources and present ideas imaginatively in a sketch book.

Develop a personal style of painting, drawing upon ideas from other artists.

Use a variety of techniques to add interesting effects – shadow, reflection, direction of sunlight, perspective.

Enhance digital media by editing.

D.T.

Food: demonstrate a range of cooking and baking techniques.

Create and refine recipes including ingredients and methods

Computing: write code to control and monitor models.

Design, make, evaluate and improve: Design with the user in mind. Make products through stages of prototypes making continual refinements

Inspiration from historical design: combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. Create innovative designs that improve existing products. Evaluate designs of products so as to suggest improvements to the user experience.

Science

Working Scientifically: Plan enquiries, including recognising and controlling variables where necessary. Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. Take measurements, using a range of scientific equipment, with increasing accuracy and precision. Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. Present findings in written form, displays and other presentations. Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.

Earth and Space: Describe the movement of Earth and other planets, relative to the Sun. Describe the movement of the moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical. Use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.

Forces: Explain that unsupported objects fall towards Earth because of gravity. Identify the effects of drag forces – air resistance, water resistance and friction. Describe why moving objects that are not driven tend to slow down. Understand that force and motion can be transferred through mechanical devices. Understand that some mechanisms allow a smaller force to have a greater effect.

Geography

Name and locate countries and cities of the world, identifying human and physical characteristics and understand how some of these have changed over time

Understand some of the reasons for geographical similarities and differences between countries.

Describe how locations around the world are changing and explain some of the reasons for change.

Describe how countries and geographical regions are interconnected and interdependent.

Use the eight points of a compass, four-figure grid references, symbols and a key to communicate knowledge of the UK and the world.

Music

Sing or play from memory with confidence. Perform solos or as part of an ensemble. Perform with controlled breathing and skilful playing.

Create rhythmic patterns. Convey the relationships between lyrics and melody.

Use the standard notation of crotchet, minim and semibreve. Use and understand simple time signatures.

Choose from a wide musical vocabulary. Describe how lyrics often reflect the cultural context of music.

MFL (Spanish)

Read and understand the main points of a text.

Use a dictionary to check words.

Convey meaning in speaking.

Understand the main points in a spoken passage.

Understand the customs, history and culture of Spain and Latin America.

Describe similarities and differences between Spanish speaking countries and this.

P.E.

Games: Choose and combine techniques in game situations.

Work alone or with team mates to gain points or possession

Field, defend and attack tactically by anticipating the direction of play

Choose the most appropriate tactics for a game.

Uphold the spirit of fair play and respect in all competitive situations.