

Year 5 – Inventors and Inventions – Spring 2

Literacy- Writing

Formal Letters of Application

- Write a formal letter using correct layout conventions, including addresses, greeting and sign-off
- Select and maintain an appropriate formal tone for a specific audience and purpose
- Organise ideas into clear, coherent paragraphs
- Use persuasive language to explain suitability for a role or opportunity
- Use modal verbs and formal sentence structures to express commitment and capability
- Apply accurate punctuation and grammar throughout
- Edit and redraft writing to improve clarity, tone and effectiveness

Biography

- Write a biography that recounts key events from a person's life in chronological order
- Select relevant information and facts from research
- Use third person consistently and accurately
- Organise writing into well-structured paragraphs
- Use time adverbials and conjunctions to show chronology and cohesion
- Use factual language appropriate to a non-fiction text type
- Apply accurate punctuation and grammar
- Edit and improve writing for clarity, accuracy and cohesion

Poems That Use Word Play

- Write poems that deliberately use word play for effect
- Experiment with language choices such as puns, alliteration, repetition and rhyme
- Choose precise and playful vocabulary to engage the reader
- Use rhythm, line breaks and structure creatively
- Manipulate language to create humour, surprise or emphasis
- Read and perform poems aloud with expression
- Edit and refine poems to improve impact and effectiveness

Maths

Multiplication and Division

- Multiply numbers up to four digits by one- and two-digit numbers using formal written methods
- Divide numbers up to four digits by one-digit numbers using formal written methods
- Use known multiplication and division facts to support calculations
- Identify factors, multiples, prime numbers and square numbers
- Solve problems involving multiplication and division, including scaling
- Interpret remainders appropriately in context
- Estimate and check answers using inverse operations
- Explain methods and reasoning using accurate mathematical vocabulary

Fractions

- Compare and order fractions with related denominators
- Recognise mixed numbers and improper fractions and convert between them
- Add and subtract fractions with the same denominator and related denominators
- Multiply proper fractions by whole numbers
- Find fractions of quantities
- Use visual representations to support understanding
- Solve reasoning and problem-solving questions involving fractions
- Explain solutions using correct mathematical language

Decimals and Percentages

- Recognise and use decimal numbers up to three decimal places
- Compare, order and round decimals
- Convert between fractions and decimals (tenths and hundredths)
- Understand and use percentages as a fraction of 100
- Convert between fractions, decimals and percentages
- Solve problems involving decimals and percentages in real-life contexts
- Use place value knowledge to support calculations

Literacy-Read aloud

The Boy in the Tower

- Read aloud age-appropriate narrative texts fluently and accurately
- Use pace, volume and intonation to convey meaning and engage the listener
- Read with expression to reflect character, mood and tension
- Pronounce unfamiliar and ambitious vocabulary accurately
- Use punctuation cues to support phrasing and expression
- Rehearse and refine reading to improve fluency and confidence
- Adapt reading aloud to reflect changes in atmosphere and events
- Perform reading aloud to an audience with clarity and control

Daffodils

- Read poetry aloud clearly, accurately and with appropriate expression
- Use intonation, rhythm and emphasis to reflect meaning
- Maintain fluency while reading poetic language
- Use punctuation and line breaks to support phrasing
- Adapt tone and volume to convey mood and imagery
- Rehearse reading aloud to improve performance quality
- Perform poetry confidently to an audience
- Demonstrate understanding of the poem through expressive reading

Guided Reading

The Legend of Rathmore Ladbroke/Blood in the Snow

- Retrieve key details and events from fiction texts
- Infer characters' thoughts, feelings and motives using evidence
- Identify themes such as courage, danger and survival
- Explain how authors build tension and atmosphere
- Summarise key events and their impact on the storyline
- Compare characters, settings or themes across two texts
- Justify answers using quotations and precise references

Spectacular Saturn

- Retrieve and record factual information from non-fiction texts

- Explain reasoning clearly and accurately

Perimeter and Area

- Measure and calculate the perimeter of rectilinear shapes
- Calculate the area of rectangles using standard units
- Compare and order shapes based on perimeter and area
- Solve problems involving missing lengths
- Use accurate mathematical vocabulary related to measurement
- Apply knowledge of perimeter and area to real-life situations
- Reason mathematically and justify methods used

Statistics

- Interpret and present data using tables, bar charts and line graphs
- Read and extract information from line graphs
- Solve comparison, sum and difference problems using data
- Ask and answer questions based on statistical information
- Use averages where appropriate to summarise data
- Identify patterns and trends in data
- Explain findings clearly using mathematical language

- Identify and explain technical and subject-specific vocabulary - Summarise key information from paragraphs and sections - Explain scientific information clearly using evidence from the text - Identify how organisational features support understanding - Ask and answer questions based on the text - Use evidence accurately to justify responses <u>Space Tourism/Astronauts</u> - Retrieve information from non-fiction texts about space exploration - Identify main ideas and supporting details - Explain similarities and differences between two non-fiction texts - Identify cause-and-effect relationships - Use subject-specific vocabulary accurately - Summarise information concisely - Support answers using evidence from the text <u>No Problem/The British</u> - Identify themes and messages within poems - Infer meaning from language, tone and structure - Explain how word choice and repetition create impact - Discuss viewpoint and voice in poetry - Compare two poems by the same poet - Summarise key ideas and messages - Justify interpretations using evidence from the text		<u>Science</u> <u>Earth in Space</u> - Describe the movement of the Earth and other planets relative to the Sun - Explain how the Earth's rotation causes day and night - Describe how the Earth's orbit around the Sun relates to a year - Identify the Moon as a natural satellite of the Earth - Explain how the Moon moves relative to the Earth - Describe the Sun, Earth and Moon as approximately spherical bodies - Use scientific vocabulary accurately, including orbit, rotation, axis, satellite and gravity - Ask relevant scientific questions about space and the Earth - Use models and diagrams to represent the movement of the Earth, Sun and Moon - Record observations and ideas using labelled diagrams and written explanations - Identify patterns in day/night and seasonal change - Explain scientific ideas using evidence and reasoning - Recognise how scientific understanding of space has developed over time	
<u>History</u> <u>Early Islamic Civilisations: Baghdad c. AD 900</u> - Locate Baghdad on a map and explain its importance in the Islamic world around AD 900 - Place the Abbasid period within a secure chronological framework - Describe key features of Baghdad as a centre of learning, trade and	<u>Design Technology</u> <u>Mechanical Systems: Cams, Pulleys and Gears</u> - Understand how mechanical systems such as cams, pulleys and gears work - Explain how mechanical systems change movement and force - Investigate and evaluate existing products that use mechanical	<u>Computing</u> <u>Game Creator</u> - Design a simple computer game based on a clear plan or idea - Create and edit backgrounds, characters and objects within a game - Use sequence, repetition and selection to control game actions - Program user interaction,	<u>Physical Education</u> <u>Badminton</u> - Use basic badminton skills, including serving, forehand and backhand shots, with increasing control - Rally with a partner using appropriate striking techniques - Move efficiently to position themselves to return the shuttle

culture ▪ Explain why Baghdad became an important city during the early Islamic civilisation ▪ Identify achievements in science, medicine, mathematics, astronomy and literature ▪ Understand the role of the House of Wisdom and the importance of knowledge and learning ▪ Describe everyday life in Baghdad, including trade, religion and education ▪ Explain how ideas, goods and knowledge spread through trade routes ▪ Use historical vocabulary accurately, including civilisation, caliph, scholar and trade ▪ Ask and answer historically valid questions about cause, significance and change ▪ Use a range of historical sources to find out about the past ▪ Make inferences about the past using evidence ▪ Communicate historical understanding through discussion and written work	systems ▪ Generate design ideas for a product that uses cams, pulleys or gears ▪ Develop clear design criteria based on the intended user and purpose ▪ Select appropriate materials and components for mechanical systems ▪ Construct a working mechanical model with increasing accuracy ▪ Use tools and equipment safely and appropriately ▪ Test and refine products to improve functionality and performance ▪ Evaluate finished products against design criteria ▪ Use correct technical vocabulary, including cam, follower, pulley, gear, rotation	including keyboard or mouse input ▪ Use variables to keep score or track game progress ▪ Test and debug a game to identify and correct errors ▪ Evaluate their game against a design brief ▪ Make improvements based on feedback and testing ▪ Explain how their game works using correct computing vocabulary ▪ Save, retrieve and share work responsibly	▪ Apply simple tactics to maintain rallies and win points ▪ Understand and follow the basic rules and scoring system of badminton ▪ Demonstrate coordination, balance and agility during play ▪ Work cooperatively with others, showing communication and teamwork ▪ Show respect, honesty and fair play ▪ Evaluate their own and others' performance, identifying strengths and areas for improvement <u>Gymnastics</u> ▪ Perform a wider range of gymnastic actions with control and precision ▪ Link movements smoothly to create longer, more complex sequences ▪ Use changes in level, direction and speed to enhance performance ▪ Demonstrate strength, flexibility and balance consistently ▪ Perform balances, rotations and travelling actions with improved technique ▪ Work safely and confidently when using apparatus ▪ Use appropriate gymnastics
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			vocabulary to describe movements and sequences ▪ Evaluate performances and suggest specific improvements ▪ Refine sequences based on feedback and self-evaluation
<u>Religious Education</u> <u>Christianity-Jesus)</u> <u>What Do We Mean by a Miracle?</u> ▪ Explain what Christians mean by the term miracle ▪ Identify and retell key miracle stories associated with Jesus Christ ▪ Describe why miracles are important within Christian belief ▪ Explain what miracle stories suggest about Jesus' identity and role in Christianity ▪ Recognise different Christian interpretations of miracles ▪ Make links between miracle stories and Christian beliefs about God's power and love ▪ Ask thoughtful questions about belief, faith and evidence ▪ Compare religious and non-religious views about miracles ▪ Use appropriate religious vocabulary accurately, including miracle, faith, healing and belief ▪ Express their own ideas and reflections respectfully, giving	<u>PSHE</u> <u>Rights and Responsibilities</u> ▪ Explain what is meant by rights and responsibilities ▪ Identify children's rights and understand why they are important ▪ Recognise that responsibilities help keep individuals and communities safe and fair ▪ Understand how rules, laws and agreements support rights ▪ Identify responsibilities at home, in school and in the wider community ▪ Explain how actions can impact the rights of others ▪ Recognise unfairness and know how to challenge it appropriately ▪ Demonstrate respect, fairness and cooperation in everyday situations ▪ Understand how to contribute positively to group and community life ▪ Express their own views about rights and responsibilities	<u>MFL- French</u> <u>Friends and Family</u> ▪ Recognise and understand vocabulary related to friends and family members in French ▪ Say and read aloud words and simple phrases about family and friendships with accurate pronunciation ▪ Describe family members and friends using simple adjectives ▪ Use basic sentence structures to talk about relationships ▪ Ask and answer simple questions about family and friends ▪ Understand and respond to short spoken phrases and sentences ▪ Read and understand short written texts about family life ▪ Show awareness of similarities and differences between family life in France and the UK <u>Working Together</u> ▪ Recognise and understand vocabulary related to teamwork and cooperation in French	<u>Music</u> <u>Build a Groove</u> ▪ Keep a steady pulse and perform rhythmic patterns accurately ▪ Use body percussion, voices and instruments to build layered rhythms ▪ Combine rhythm patterns to create a cohesive groove ▪ Perform as part of an ensemble, listening and responding to others ▪ Identify and describe musical elements, including pulse, rhythm, tempo and texture ▪ Use repetition and variation to develop rhythmic ideas ▪ Use musical vocabulary accurately to discuss rhythm and performance ▪ Evaluate their own and others' performances, suggesting improvements <u>Epoca</u> ▪ Listen attentively to music from a different cultural tradition ▪ Identify key musical features,

reasons	respectfully and thoughtfully	▪ Use simple phrases to express opinions and preferences when working with others ▪ Follow and give simple instructions in French during collaborative activities ▪ Participate in short spoken exchanges using rehearsed language ▪ Listen attentively and respond appropriately to others ▪ Read and understand short phrases and sentences related to working together ▪ Use correct pronunciation and intonation when speaking ▪ Show confidence in speaking and listening activities within a group	including rhythm, tempo, texture and dynamics ▪ Recognise how rhythm and layering contribute to the overall groove ▪ Perform rhythmic patterns inspired by the music ▪ Use movement or instruments to respond creatively to musical elements ▪ Work collaboratively to create and refine short musical performances ▪ Use musical vocabulary accurately to describe features of the music ▪ Reflect on and evaluate how effectively music communicates mood and style
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