

**BARNES PRIMARY SCHOOL CURRICULUM MAP
YEAR GROUP: 5**

| | | AUTUMN | SPRING | SUMMER |
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| THEME | | Title of Learning Theme SPACE | Title of Learning Theme INDIA | Title of Learning Theme EXPLORATION AND JOURNEYS |
| CORE CURRICULUM | ENGLISH | <p align="center">Texts studied: Butterfly Lion – Michael Morpurgo Memorial – Gary Crew The Iron Man - Ted Hughes</p> <p align="center">Writing outcomes: Diary Informal letter writing Newspaper report TV news script Recount (linked to trip to Design Museum) Persuasive argument</p> | <p align="center">Texts studied: Shaira’s Secret The Highwayman</p> <p align="center">Writing outcomes: Playscript Narrative writing Diary</p> | <p align="center">Texts studied: Journey to Jo’burg Macbeth</p> <p align="center">Writing outcomes: Narrative Email Balanced argument</p> |
| | MATHS | <p align="center">Place Value Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit; count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000; interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers; round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000; solve number problems and practical problems that involve all of the above; read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p> <p align="center">Addition and Subtractions Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction); add and subtract numbers mentally with increasingly large numbers; use rounding to check answers to calculations; solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p align="center">Multiplication and division Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers; know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers; establish whether a number up to 100 is prime and recall prime numbers up to 19; multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 recognise and use square numbers and cube numbers; solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes;</p> <p align="center">Statistics – through science and geography Solve comparison, sum and difference problems using information presented in a line graph; complete, read and interpret information in tables, including timetables.</p> | <p align="center">Multiplication and division Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers; multiply and divide numbers mentally drawing upon known facts; Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context; solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign; solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</p> <p align="center">Measure Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres; calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes; estimate volume and capacity;</p> <p align="center">Geometry – properties of shapes identify 3-D shapes, including cubes and other cuboids, from 2-D representations; know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles; draw given angles, and measure them in degrees (o); identify: angles at a point and one whole turn (total 360o); angles at a point on a straight other multiples of 90; use the properties of rectangles to deduce related facts and find missing lengths and angles; distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p> <p align="center">Geometry – position and direction Identify, describe and represent the position of a shape following a reflection or translation;</p> | <p align="center">Fractions and percentages Compare and order fractions whose denominators are all multiples of the same number; identify, name and write equivalent fractions of a given fraction; recognise mixed numbers and improper fractions and convert from one form to the other; add and subtract fractions with the same denominator and denominators that are multiples of the same number; multiply proper fractions and mixed numbers by whole numbers; recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal</p> <p align="center">Decimals Read and write decimal numbers as fractions; recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents; round decimals with two decimal places to the nearest whole number and to one decimal place; read, write, order and compare numbers with up to three decimal places; solve problems involving number up to three decimal places</p> <p align="center">Measure solve problems involving converting between units of time; Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</p> |

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| <p>SCIENCE</p> | <p>Earth and Space Describe the movement of the Earth, and other planets, relative to the Sun in the solar system; describe the movement of the Moon relative to the Earth; describe the Sun, Earth and Moon as approximately spherical bodies; use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p> | <p>Sound Identify how sounds are made, associating some of them with something vibrating; recognise that vibrations from sounds travel through a medium to the ear; find patterns between the pitch of a sound and features of the object that produced it; find patterns between the volume of a sound and the strength of the vibrations that produced it; recognise that sounds get fainter as the distance from the sound source increases</p> | <p>Changing materials Properties of solids, liquids and gases; demonstrate that dissolving, mixing and changes of state are reversible changes; identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> | <p>Living things and their habitats Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird; describe the life process of reproduction in some plants and animals; explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> | <p>Keeping healthy Describe the changes as humans develop to old age. 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> |
| <p>ICT</p> | <p>e-safety Discuss and define e-safety – focusing on SMART (Safe, Meeting, Accepting, Reliable, Tell). Review features of an effective poster (look at previous years' work and some existing posters from the internet). Evaluate poster and identify features – annotate using Skitch. Email annotated posters. Create success criteria for creating posters.</p> <p>Microsoft Publisher – e-safety Poster Design Explore Publisher and its various features. Use publisher to create posters (experiment with background colours, text size, font and colour, use word art, insert images from the internet). Review posters – peer assess and improve. Self-assess final posters.</p> <p>e-safety – Design questionnaire/survey Study the Young People and e-safety Survey – Igfl. Devise e-safety questionnaires. Respond to questionnaires.</p> <p>Microsoft Excel – data handling Explore Microsoft Excel Input data into cells Design graphs/charts to display results from e-safety survey. Review, peers assess</p> | <p>Programming and Scratch Use scratch to create a range of computer programs; understand the language of computer programming; build understanding of computational thinking; build understanding of computational thinking; teach key Computing skills – Sequencing, Inputs, Selection, Repetition, Variables</p> <p>e-safety – Reliability What does reliable mean? Why might some things we see online not be reliable? (people and content) How could we check reliability? (check 2/3 sites, check website endings) Children carryout Childnet – “Trust Me” activities.</p> | <p>Topic: Databases Number Operations Ordering and Presenting Data Add, Edit and Calculate Data Solving Problems Party Plan Budget</p> <p>E-safety (1 Lesson) Securing our information What is a password? What kind of sites do we use passwords for? Password guidelines – how to create ‘strong’ passwords. NB – a strong password is one that contains letters and numbers, upper and lower case, 8 or more characters, is hard to guess and easy to remember – and is changed frequently</p> <p>Website Design Explore WIX.com – investigating existing webpage designs Set up account using Igfl emails (e-safety link). Design website to advertise Thames Young Mariners. Peer assessment/evaluation</p> | | |

FOUNDATION SUBJECT / LEARNING THEME

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| FOUNDATION SUBJECT / LEARNING THEME | HISTORY | <p style="text-align: center;">Humanities Barnes: from past to present</p> <p>In this unit the children investigate how the local area changed during the Victorian era, due to the industrial revolution. Children will go on a local history walk to spot historic features (such as Flemish brick bonding) and compare it with old photographs. They will build on their map reading skills, using historic maps, to source information. This will allow them to answer ‘When was this area [Westfields] built?’ and ‘How did land use change over time?’ They will use primary and secondary sources to investigate the main cause of these changes, exploring these ideas through role play, and will discover the significance of the railway that was built through the area.</p> | <p style="text-align: center;">How have our ideas about space developed over time? What were the similarities and differences between the ideas of Ptolemy, Copernicus and Galileo? What was the Space race?</p> | <p style="text-align: center;">Journeys: Vikings and Anglo-Saxons Who were the Vikings? How did people live in Viking Britain? Who were the Anglo Saxons? How did people live in Anglo- Saxon Britain.</p> |
| | GEOGRAPHY | <p style="text-align: center;">Space: Locational knowledge</p> <p>Key skills: Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones</p> | <p style="text-align: center;">India</p> <p>Content: Where is India? What are India’s most important physical and human features? How and why does India’s climate vary?</p> <p>Key skills developed: use of geographical vocabulary; interpreting variety of maps; understanding of physical and human geography including climate zones</p> | <p style="text-align: center;">Journeys</p> <p>Investigate the impact of air pollution on our locality Plot aircraft routes to Heathrow on world map Analyse and present data collected and review impact of air travel Investigate how schools cope with air pollution Debate the pros and cons of building a third runway and the impact on the locality</p> |
| | DESIGN TECHNOLOGY | <p style="text-align: center;">Space: textiles</p> <p>Content: children design, make and evaluate a space decoration to improve a bedroom</p> <p>Key skills: sewing stitches; sewing on buttons</p> | <p style="text-align: center;">India: cooking</p> <p>Content: children plan, make and evaluate a mango lassi</p> | <p style="text-align: center;">Journeys: using wood</p> <p>Content: designing, making, evaluation bridges Key skills: evaluating current products; cutting wood; joining wood; suggesting improvements (this is only taught if there is enough time in the timetable)</p> |
| | ART | <p style="text-align: center;">Space: pastel planets</p> <p>Children develop their techniques for using soft pastels They learn how to create a spherical shape using line and shade They evaluate their work and that of others. Children develop their watercolour techniques and create a butterfly to accompany Butterfly Lion writing.</p> <p>Over the course of the year, each child will have six one-hour sessions with the school’s artist in residence</p> | <p style="text-align: center;">India: divali pots</p> <p>Children investigate the shape, colour and pattern of existing divali pots; they design their own and use coiling clay techniques to create their own pot; after firing, this is decorated with paint. Children investigate pattern in Hindu rangoli patterns to create their own.</p> <p style="text-align: center;">Arts week – last week in Spring 1</p> | <p style="text-align: center;">Shape and Pattern in Anglo-Saxon Art</p> <p>Through a trip to the Victoria and Albert Museum, children investigate Anglo Saxon jewellery and design their own brooch.</p> |
| PHYSICAL EDUCATION | <p style="text-align: center;">Yoga and Dance</p> <p>The theme for the dance unit is A Journey through Space.</p> | <p style="text-align: center;">Swimming – Pools on the Park</p> | <p style="text-align: center;">Gymnastics</p> <p>Thames Young Mariners – outdoor and adventurous activities including kayaking, orienteering, raft building and archery</p> | |
| PERSONAL DEVELOPMENT | <p style="text-align: center;">Citizenship education</p> <p>What does it mean to be a citizen? What does it mean to be a citizen of Barnes Primary School? To appreciate that in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority</p> | <p style="text-align: center;">Health and Prevention</p> <p>How to recognise early signs of physical illness, such as weight loss or unexplained changes to the body The facts and science relating to immunisation and vaccination</p> <p style="text-align: center;">Building Good Relationships</p> <p>To discuss what values are important in relationships ; to identify positive qualities and expectations for a variety of relationships; how to recognise who trust and who not to trust, how to judge when a friendship is making them feel unhappy or uncomfortable, managing conflict, how to manage these situations and how to seek help or advice from others, if needed</p> | <p style="text-align: center;">Sex and relationships education</p> <p>Explain the main physical and emotional changes that happen during puberty; to explore the impact of puberty on the body and the importance of physical hygiene; to explore ways to get support during puberty; understand that menstruation and wet dreams are a normal part of growing up</p> | |
| RELIGIOUS EDUCATION | <p style="text-align: center;">Focus: Christianity</p> <p>What are the key similarities between the two gospel accounts of the Christmas story? What is the importance of interpretation and truth?</p> | <p style="text-align: center;">Focus: Hinduism</p> <p>What does it mean to be a Hindu? What are the key beliefs and practices of Hinduism? What can I learn from Hindu values? This unit of work includes a visit to Neasden Mandir</p> | <p style="text-align: center;">Focus: Islam</p> <p>Why are pilgrimages important to different religions? Focus on Hajj and compare with other faith pilgrimages How would it feel to be a pilgrim? What special journeys have you taken? What did they mean to you?</p> | |