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| Autumn 1 | Science | **Animals including Humans**  We will be identifying and naming the main parts of the human circulatory system, and describing the functions of the heart, blood vessels and blood. We will explore the impact of diet, exercise, drugs and lifestyle on the way human bodies function. We will also be learning about the ways in which nutrients and water are transported within animals, including humans | **English**  **Setting Descriptions**  We will be learning using the book ‘The Journey’ by Francesca Sanna to write setting descriptions.  **Biographies**  We will be reading ‘The Man Who Walked Between the Towers’ to learn about the extraordinary life of Phillipe Petit, and write our own biographies inspired by Black History Month. |
| History | **Early Islamic Civilisations**  We will be looking at the Islamic civilisation from CE 900 with a focus on how Baghdad was a centre for knowledge, wealth and peace. |
| Computing | **Programming – Scratch Games**  We will design, create and evaluate a game using  scratch by following a specification. |
| RE | **What matters most to Christians and Humanists?**  We will be learning about Humanism and considering whether we need religious belief in order to have an understanding of right and wrong and the need to care for others. | **Maths**  **Number and Place Value**  We will be ordering and comparing numbers up to 10 000 000 and determining the value of each digit. We will be rounding any whole number to a required degree of accuracy.  **Addition and Subtraction**  We will be adding and subtracting numbers using the written method and mentally with increasingly large numbers.  **Multiplication and Division**  We will be multiplying numbers up to 4 digits by a 2-digit whole number using the formal written methods. We will also be numbers up to 4 digit by 2 digit by using the long division written method.  **Problem Solving & Reasoning**  We will be solving a range of number and practical problems that involve all of the above. |
| Art | **Giueseppe Arcimboldo**  We will be learning about the art of Giuseppe Arcimboldo. The children will develop skills in observational drawing of fruit and vegetables and use these skills to create a self-portrait in the style of artist. |
| Music | **Happy**  We will use the song Happy by Pharrell Williams and other songs to think about what makes us happy. Children will work towards playing the song with instruments and create their own lyrics. |
| PSHE | **Mental & Emotional Health**  We will be learning how to challenge negative  thoughts and feelings as well as how to resist and  challenge discriminations and stereotyping. The children will consider their own feelings and we will discuss strategies to support these feelings. The children will also look at the positive and negative impacts of the internet on their mental health. |
| Outdoor PE | **Health Related Exercise**  We will be learning about the functions of the cardiovascular system, and thinking about how aerobic fitness affects our bodies. |
|  | Indoor PE | **Gymnastics: Mirroring & Matching**  We will be completing mirroring and matching  movements both on and off apparatus before  building up to short performances to our peers. |

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| Autumn 2 | Science | **Evolution (Part 1)**  We will think about characteristics passed from one generation to the next and how species have adapted to suit their environments. We will discover the process of natural selection, and how our understanding of the process of evolution has developed over time thanks to the work of scientists and palaeontologists. | **English**  **Short Stories**  We will be learning using the book ‘Tales of the Bold, the Brave and the Beautiful’ by Oliver Sykes and Sophie Wilan to write our own short stories about the lives of children growing up in Manchester.  **Manifesto**  We will be reading ‘The Barnabus Project’ by The Fan Brothers to inspire us to write a manifesto about animal testing. We will host our own general election resulting in a class prime minister for the day. |
| Geography | **Marvellous Maps**  We explore a range of maps available to geographers and to develop their understanding of the key features of maps. They will study a range of maps and atlases, including digital maps, and compare their features. The will learn to use the eight compass points to give directions and give grid references to locate places on a map. By comparing maps of the same place, children will learn about the way that places have changed over time. |
| Computing | **Garage Band**  This topic is designed to give the class the opportunity to learn how to use and create music on Garage Band (using the school iPads). The topic will begin by teaching the class how to create a short piece of music on Garage Band by following a set of step-by-step instructions. They will learn how to create a new song, add and choose a drum loop, add different instruments (guitar, bass, strings and piano) and how to use the built in microphone too. Using step-by-step instructions they will add and play different instruments to create a short piece of music. |
| RE | **What does it mean to be a Muslim in Britain today?**  We will explore the five pillars of Islam and the importance of these to Muslim believers. The children will gain a greater understanding of Islam and what we can learn from its beliefs, values and ideas. | **Maths**  **Number: Division**  We will be consolidating our knowledge of formal methods of long division before applying these in real world problem solving scenarios.  **Fractions**  We will be recapping the fraction knowledge we have learnt in Key Stage 2 before moving on to multiplying and dividing fractions.  **Geometry: Position & Direction**  We will be reading and writing coordinates in all four quadrants before translating and reflecting shapes.  **Problem Solving & Reasoning**  We will be solving a range of number and practical problems that involve all of the above. |
| DT | **Seasonal cooking**  We will learning about how seasons may affect the food available before using a range of techniques such a peeling and cutting to prepare our own seasonal dish. |
| Music | **Jazz**  We will be developing an understanding of the history of music, specifically jazz.  In this unit we will improvise melodic and rhythmic phrases as part of a group as we will be learning about improvisation and ostinatos. |
| PSHE | **Living in the Wider World**  We will be exploring the role of the media in our lives, and thinking of how we can be critical of it whilst still enjoying it. Children will discuss the positives of money; its risks and rewards; ways it can be kept safe and secure and learn the differences between credit, debt and interest. Children will discuss the types of jobs they might be interested in and think about the skills they would need to achieve these careers. |
| Outdoor PE | **Cricket**  We will be learning the basic rules of cricket and developing a range of skills to use in isolation and in a competitive context. This will include striking a bowled ball, bowling and working on their throwing and catching skills. |
|  | Indoor PE | **Leadership**  Children will learn the attributes and skills that are required of an effective leader by following the ‘STEP’ principles: space, task and people. They will have the opportunity to lead a game and work collaboratively with their classmates. |

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| Spring 1 | Science | **Evolution and Inheritance (Part 2)**  We will think about characteristics passed from one generation to the next and how species have adapted to suit their environments. We will discover the process of natural selection, and how our understanding of the process of evolution has developed over time thanks to the work of scientists and palaeontologists. | **English**  **The Giant’s Necklace**  We will be writing diaries from the perspective of different characters using the book ‘The Giant’s Necklace’ by Michael Morpurgo.  **Review**  We will explore online reviews and write our own including responses. |
| History | **Crime & Punishment**  We will be answering the enquiry question ‘How has crime and punishment changed over time in Britain?’  We will explore what was seen as a crime over time and the different gruesome punishments that were handed out to criminals. We will find out about the development of the police force from the Victorian period right through to the new millennium. |
| Computing | **Coding Crash Course**  Children will design, write and debug programs and use logical reasoning to explain them. They will work with variables and various forms of input and output. |
| RE | **Can religion help to reduce racism?**  We will investigate different religions and spiritual ways of life to see  what they do to reduce racism, including the work of religious leaders in  promoting respect and what the teachings of different sacred texts have  to say about human unity. | **Maths**  **Number: Decimals**  We will be consolidating our knowledge of decimals in previous years before  dividing and multiplying decimals up to 3dp.  **Number: Percentages**  We will be finding and ordering equivalent fractions, decimals and percentages before finding percentages of amounts.  **Number: Algebra**  We will first look at forming expressions before moving on to solving more complex equations.  **Problem Solving & Reasoning**  We will be solving a range of number and practical problems that involve all of the above. |
| Art | **Islamic Art**  We will be exploring different types of Islamic art, including geometric  patterns, vegetal patterns and calligraphy. |
| Music | **Benjamin Britten**  We will look at the life and different works of Benjamin Britten. |
| PSHE | **Living in the Wider World**  Children will discuss the types of jobs they might be interested in and think about the skills they would need for these careers. They will produce leaflets to advertise these jobs and persuade others to join the profession. |
| Outdoor PE | **Football**  Children will practise dribbling, passing, turning and moving skills to keep possession of the ball and score. They will incorporate attacking and defending techniques to win games. |
|  | Indoor PE | **Dance: Prejudice & Discrimination**  Children will plan, create, practise and perform dances focused on the power of being united when tackling prejudices and discrimination. |

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| Spring 2 | Science | **Electricity**  Building on their work in year 4, we will be constructing simple series circuits, to help answer questions about what happens when different components, for example, switches, bulbs, buzzers and motors, are added. We will also learn how to represent a simple circuit in a diagram using recognised symbols | **English**  **Setting Descriptions**  We will be writing setting descriptions using the text ‘I Am the Subway’ by Kim Hyo-eun. We will look at interactions between the characters and create dialogue to continue their individual stories. The children will be using expanded noun phrases and figurative language in their writing.  **World Book Day**  Children will celebrate World Book Day this half term with a focus on vocabulary. We will compose short stories to share with children around school. |
| Geography | **Extreme Earth**  Children will identify examples of extreme weather conditions around the world, including lightning, floods, typhoons, hurricanes, blizzards and hailstorms. They will define each of these occurrences and think about the effects these can have on people and landscapes. |
| Computing | **Spreadsheets – Purple Mash**  Using 2Calculate children can use a spreadsheet to model a real-life situation, come up with solutions, and make practical use of a spreadsheet to help plan actions. They will also create a spreadsheet to answer a mathematical question relating to probability. |
| RE | **Salvation – What difference does the resurrection make to Christians?**  Children will learn about how important the resurrection of Jesus is to Christians and how they worship on Good Friday and Easter Sunday. | **Maths**  **Number: Fractions, Decimals and Percentages**  We will be finding and ordering equivalent fractions, decimals and percentages before finding percentages of amounts.  **Number: Area and Perimeter**  We will build on prior  knowledge of area and perimeter to explore the area of a triangles and parallelograms before moving on to finding volume of 3D objects.  **Problem Solving & Reasoning**  We will be solving a range of number and practical problems that involve all of the above. |
| DT | **Steady Hands Game**  Children will apply their knowledge of electrical circuits to designing and making a steady hands game. |
| Music | **You’ve Got A Friend**  Children will use the glockenspiels to perform a variety of works by Carole King. They will look at her life and influence as well as other songs in the period. |
| PSHE | **Keeping Safe**  Children will look at drugs, alcohol and tobacco . They will learn the about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drug-taking. They will look at what peer pressure is and practise techniques for resisting it. They will also learn basic first aid and what to do in an emergency situation. |
| Outdoor PE | **Tag Rugby**  Children will practise passing, attacking and defending using rugby balls. They will consider how to use space and movement and learn how to apply pressure during games. |
|  | Indoor PE | **Taekwondo**  Children will work with an instructor from British Taekwondo for 6 weeks to gain an insight into taekwondo. |