St. Nicholas Catholic Primary School

Curriculum Overview – Year 5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Science	**Living things and their Habitats** Children will learn about the process of reproduction and the life cycles of mammals, amphibians, insects and birds. They will learn about different types of mammals and their different life cycles, making life cycle wheels to present their learning. Children will find out about Jane Goodall and her work with the now-endangered chimpanzees in Africa. They will explore metamorphosis in insects and amphibians, comparing their life cycles. Children will explore the life cycles of birds.	**Earth and Space** Children learn about the relative size of the Moon, Earth and Sun. They learn how and why shadows change. Children learn about the Earth's orbit and the phases of the moon. And Children will be able to recite the names of the planets in order. Children will record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graph identifying scientific evidence that has been used to support or refute ideas or arguments.	**Forces** Children learn about types of forces such as gravity, friction, water resistance and air resistance. Children will also learn about the use of mechanisms such as levers, gears and pulleys. The children will identify forces and find out about Isaac Newton and his discoveries about gravity. The children will look for patterns and links between the mass and weight of objects, using newton meters to measure the force of gravity. They will also work collaboratively to investigate air and water resistance. They will have the opportunity to explore friction, developing their own brake pad for a tricycle or scooter. Children will discuss how variables other than the one being tested can be kept the same to help make a test fair. Children will find out about different mechanisms, including levers, gears and pulleys, and will design their own marvellous machine.	**Living Things and their Habitats: Plant Life Cycles** Children will learn about the process of reproduction and the life cycles of plants, The children will explore reproduction in different plants, including different methods of pollination and asexual reproduction. The children will have the opportunity to take cuttings from plants, creating clones of the parent plant.	**Animals including Humans** Children will learn about the changes that human beings experience as they develop to old age. Children will learn about the life cycle of a human being. They will investigate the development of babies and compare the gestation period of humans and other animals. They will learn about the changes experienced during puberty and why these occur. Children will investigate the changes to the body as humans get older, as well as comparing the life expectancy of different animals.	**Properties and changes of materials** Children will learn about different materials, their uses and their properties, as well as dissolving, separating mixtures and irreversible changes. The children will sort and classify objects according to their properties. They will explore the properties of materials to find the most suitable material for different purposes. Working scientifically, collaboratively to investigate the best thermal insulator to make a lunch box, make predictions and form conclusions. They will have chance to find the best electrical conductor in the context of making flood-lights brighter. They will have the opportunity to work in a hands-on way to explore dissolving, identifying the different variables in their own investigations. They will find different ways to separate mixtures of materials, using filtering, sieving and evaporating. They will learn about irreversible changes, and participate in two exciting investigations to create new materials, including casein plastic and carbon dioxide.

History	**Ancient Greece -** learning about who the Ancient Greek people were, when they lived and where and how they were able to establish their empire. Learning about how the political system worked in Ancient Greece, investigating the legacy of Athenian Democracy and comparing it with the political systems we have today.		**Stone Age to Iron Age-** Children will learn about Stone Age to Bronze Age period impacted on life in Britain. They will learn about how early man survived in a harsh environment, why Skara Brae was important for understanding life in the Stone Age, how copper mining was crucial to the Bronze Age and why Stonehenge was built. Children will also learn about why Iron Age people developed hillforts and how important Druids were in Iron Age Britain.		**Ancient Mayan Civilisation-** The children will learn who the ancient Maya people were and where and when they lived. They will use maps and atlases to locate Maya cities and identify countries in Mesoamerica. In addition to this they will learn about the religious beliefs and rituals of the ancient Maya people and find out more about some of the many gods they worshipped. The children will also learn about the Maya number system and have the opportunity to read and write Maya numbers and solve number problems.	
Geography	**Region within UK- East Anglia** This unit will teach your class about the geography of East Anglia, focusing on the main human and physical features. Children will learn about the geographical similarities and differences between East Anglia and their local area. Children continue to build on their map skills using atlases, world maps and globes more widely, along with using online mapping programmes and interpreting a range of information.		**A region within a European Country - Athens & Central Greece** This unit will teach your class about the geography of Athens. Focusing on the main human and physical features. Children will learn about the geographical similarities and differences between Athens and their local area. Children continue to build on their map skills using atlases, world maps and globes more widely, along with using online mapping programmes and interpreting a range of information.		**Coastal Study - Western Super- Mare** This unit covers a coastal study of Western Super-Mare. Focusing on the main human and physical features. Children will learn about the geographical similarities and differences between Western Super- mare and their local area. Children continue to build on their map skills using atlases, world maps and globes more widely, along with using online mapping programmes and interpreting a range of information.	
Computing	**Flowol** Children are introduced to flowcharts and how they are used to program and control devices. Children are taught to build sequences of instructions, control multiple outputs and structure algorithms with decisions and inputs. Although many external hardware interfaces can be attached and linked to a computer using Flowol, this unit is designed as an introduction to the software and the concepts of flowchart.	**Radio Station** Children are introduced to software and digital devices for recording sound. Based around the theme of a Radio Station, children are offered a creative approach including interviewing, making adverts and using jingles. Children write scripts and design additional advertising for their Radio Station. Opportunities are included for children to present, listen, review and evaluate their own content as well as professional and commercial examples, plus those created by their peers.	**3D Modelling: SketchUp** Children extend their drawing skills to create 3D models based on using the software SketchUp. Children will learn how to create simple and complex 3D models. They will be able to add detail and manipulate 3D models using a variety of tools.	**Online Safety** Children will learn about email safety with a focus on preventing and dealing with spam. They will consider the importance of strong passwords and learn how to create them. Children will build on their knowledge of plagiarism and fair use of people's work by learning how to write citations and references for websites they may use. They will scrutinise photographs that they see online and learn how easy it is to manipulate pictures and present them as reality.	**Using and applying** Children are given an engaging open-ended project to apply the skills they have developed by working on other units within the year group. Children work in groups on the project which incorporates software, skills and aims that have been covered in previous units.	**Scratch 3.0 Developing Games** This unit builds on the previous unit in Year 4 (Questions and Quizzes) using Scratch to build and edit algorithms for simple games. The unit is designed to help children develop their skills in writing their own algorithms as well as editing and debugging existing codes.

PE	**Gymnastics** In this unit, pupils create longer sequences individually, with a partner and a small group. They learn a wider range of actions such as inverted movements to include cartwheels and handstands. They explore partner relationships such as canon and synchronisation and matching and mirroring. Pupils are given opportunities to receive and provide feedback in order to make improvements on their performances. In Gymnastics as a whole, pupils develop performance skills considering the quality and control of their actions. **Netball** In this unit pupils will develop defending and attacking play during even-sided 5-a-side netball. Pupils will learn to use a range of different passes to keep possession and attack towards a goal. Pupils will be encouraged to work collaboratively to think about how to use skills, strategies and tactics to outwit the opposition. They will start to show control and fluency when passing, receiving and shooting the ball. They will learn key rules of the game such as footwork, held ball, contact and obstruction. Pupils also develop their understanding of the importance of fair	**Dance** Pupils learn different styles of dance, working individually, as a pair and in small groups. In dance as a whole, pupils think about how to use movement to explore and communicate ideas and issues, and their own feelings and thoughts. As they work, they develop an awareness of the historical and cultural origins of different dances. Pupils will be provided with the opportunity to create and perform their work. They will be asked to provide feedback using the correct dance terminology and will be able to use this feedback to improve their work. Pupils will work safely with each other and show respect towards others. **Dodgeball** Pupils will improve on key skills used in dodgeball such as throwing, dodging and catching. They also learn how to select and apply tactics to the game to outwit their opponent. In dodgeball, pupils achieve this by hitting opponents with a ball whilst avoiding being hit. Pupils are given opportunities to play games independently and are taught the importance of being honest whilst playing to the rules. Pupils learn officiating skills when refereeing games and are given opportunities to	**Yoga** Pupils learn about mindfulness and body awareness. They learn yoga poses and techniques that will help them to connect their mind and body. The unit looks to improve wellbeing by building strength, flexibility and balance. The learning includes breathing and meditation taught through fun and engaging activities. Pupils will be given the opportunity to work collaboratively with others and be given the opportunity to create their own flows and lead others. **Handball** Pupils will develop key skills of attacking and defending such as throwing, catching, dribbling, intercepting and shooting. Pupils use these skills to maintain possession of the ball and to create scoring opportunities in attack. They will develop defending principles such as gaining possession of the ball, denying space and stopping goals. They will be encouraged to work collaboratively to develop strategies and tactics in both attack and defence. They develop their understanding of the rules and the importance of fair play and honesty whilst self-managing matches. They will improve their ability to	**Football** Pupils will improve their defending and attacking play, developing further knowledge of the principles and tactics of each. Pupils will begin to develop consistency and control in dribbling, passing and receiving a ball. They will also learn the basics of goalkeeping. Pupils will evaluate their own and other's performances, suggesting improvements. They will learn the importance of playing games fairly, abiding by the rules of the game and being respectful of their teammates, opponents and referees. **Volleyball Y5/6** Pupils focus on developing the skills they need to play continuous rallies in volleyball. They will learn about the ready position, ball control, sending a ball over a net and how to use these skills to make the game difficult for their opponent. In all games activities, pupils have to think about how they use skills, strategies and tactics to outwit the opposition. Pupils will be given the opportunity to work collaboratively with others and will develop confidence to achieve their best. They will understand the importance of abiding by rules to keep themselves &	**Tennis** In this unit pupils develop their competencies in racket skills when playing Tennis. They learn specific skills such as a forehand, backhand, volley and underarm serve. Pupils are given opportunities to work cooperatively with others and show honesty and fair play when abiding by the rules. Pupils develop their tactical awareness, learning how to outwit an opponent. **Rounders** Pupils develop the quality and consistency of their fielding skills and understanding of when to use them such as throwing underarm and overarm, catching and retrieving a ball. They learn how to play the different roles of bowler, backstop, fielder and batter and to apply tactics in these positions. In all games activities, pupils have to think about how they use skills, strategies and tactics to outwit the opposition. Pupils work with a partner and group to organise and self-manage their own games. Pupils play with honesty and fair play when playing competitively.	**Athletics** In this unit, pupils are set challenges for distance and time that involve using different styles and combinations of running, jumping and throwing. As in all athletic activities, pupils think about how to achieve their greatest possible speed, height, distance or accuracy and learn how to persevere to achieve their personal best. They learn how to improve by identifying areas of strength as well as areas to develop. Pupils are also given opportunities to lead when officiating as well as observe and provide feedback to others. In this unit pupils learn the following athletic activities: running over longer distances, sprinting, relay, triple jump, shot put and javelin. **Golf** Pupils will develop skills and apply them to striking, chipping, putting and playing a short and long game. They will develop their coordination, accuracy and control of movements. These lesson plans will enable teachers to provide pupils with activities that help them understand the principles of golf and develop fluid movements

	play and honesty while self managing games.	evaluate and suggest improvements to their own and others' performances.	evaluate their own and others' performance.	others safe. Pupils will develop character and control through engaging with coping strategies when exposed to competition and will be given the opportunity to take on the role of referee.		that can be used in game situations. They will be confident in selecting the appropriate shot for the situation. Pupils will be asked to observe and recognise improvements for their own and others' skills and identify areas of strengths. Pupils will be given the opportunity to work on their own and others, taking turns and sharing ideas. Pupils will be creative in designing their own course.
Design & Technology	**Food: What could be healthier?** Focusing on nutrition, children research and modify a traditional Bolognese sauce recipe to make it healthier. They will cook their new and improved versions, make appropriate packaging and also learn about the ethical considerations of farming cattle.	**Mechanical Systems: Pop up books** After choosing a simple story or nursery rhyme, children design and create a four-page pop-up storybook design. They will also add accompanying captions, incorporating a range of mechanisms and decorative features, including: structures, levers, sliders, layers and spacer	**Textiles: Stuffed toys** Creating their own stuffed toy is a really fun project as children can bring their drawings to life and can make them as challenging or as simple as they choose. Children sketch and draw designs. Not only does this topic give them the chance to apply skills they have learned in previous topics, it also introduces them to a new stitch – blanket stitch.	**Electrical Systems: Electronic greetings cards** This unit builds on pupils' knowledge of how to incorporate electrical circuits into products from Y4. Children explore how circuits can be adapted to suit different purposes, explore series circuits and recreate one using conductive adhesive tape. They then apply this knowledge to design and create an electronic greeting card.	**Structure: Bridges** This topic develops children's understanding of secure structures and introduces them to measuring, sawing and joining wood accurately. After learning about different types of bridges and also exploring how the strength of structures can be affected by the shapes used. Children create their own wooden bridge and test its durability. This topic develops children's understanding of secure structures and introduces them to measuring, sawing and joining wood accurately. After learning about different types of bridges and also exploring how the strength of structures can be affected by the shapes used. Children create their own wooden bridge and test its durability, evaluating as they go through the making process.	
Art & Design	**Every picture tells a story** Making skills - Improving their control of 2D and 3D materials to suit a purpose. Formal elements - Developing understanding of colour, line and form. Generating ideas - Using thoughts and feelings to review ideas about their culture. Knowledge of artists including - Andy Warhol, Jon Singer, Magdalene Oduhdo and Banksy. Learning how artists make political statements through their art, e.g. Banksy Evaluating - Forming opinions about great artworks and key political events through debate and discussion.		**Formal elements: Architecture** House drawing - Drawing from observation. House monoprints - Creating a monoprint from observation. Hundertwasser house - Transforming buildings in a style inspired by the artist Hundertwasser. Be an architect - Designing a building in an architectural style Monument - Designing a monument to symbolize a building in an architectural style.		**Design for a purpose** Making skills- Design, control and manipulate art materials to suit a purpose. Formal elements- Build confidence in using colour, shape and pattern. Generating ideas- Expressing ideas and feelings about familiar products, designing and inventing new products. Knowledge of artists - Learning how artists use colour, pattern and shape to create positive visual effects. Evaluating - Presenting, discussing and critically appraising each other's work using the language of art.	

					Art and design skills Packaging collage - Studying familiar packaging to inspire art. Drawing: picture the poet Creating visual representations of poetry - Creating drawings using the continuous line method, using writing to draw forms. Drawing: a walking line Drawing using observation, imagination and creativity Design: little inventors - Designing a new invention.	
Music	**Our Community** The song Jerusalem provides the basis for looking at changes through time. The children are given opportunities to compose and perform music inspired by their local community, both past and present	**Solar System** Embark on a musical journey through the solar system, exploring how our universe inspired composers including Claude Debussy, Gustav Holst and George Crumb. The children learn a song, and compose pieces linked to space.	**Life Cycles** Explore the human life cycle with music by Johannes Brahms, Luciano Berio, Franz Liszt and Claudio Monteverdi. The wide variety of musical moods, styles and genres inspires singing, performing and composing using new techniques and structures.	**Keeping Healthy** From body-popping and gospel-singing to swimming and cycling, the children are taken through their paces, and they put together an invigorating performance using new musical techniques.	**At the Movies** Explore music from 1920s animated films to present day movies. The children learn techniques for creating soundtracks and film scores, and they compose their own movie music.	**Celebration** A lively celebration in song for the children to perform at a class assembly, a school concert or fete. The celebratory, upbeat mood will soon have the audience joining in.
PSHE	**Good to be me** ● You are unique ● Let it out ● Uncomfortable feelings ● Confidence ● Do the right thing ● Making amends	**Relationships** ● People we love ● Think before you act ● It is OK to disagree ● You decide ● Secrets ● False friends	**Being Healthy** ● Mental Wellbeing ● Internet safety and harms ● Physical Health and fitness ● Healthy Eating ● Drugs, alcohol and tobacco ● Health and prevention ● Basic first aid	**Going for goals** ● You can achieve ● anything ● Breaking down barriers ● Future focus ● Equal opportunities ● The world of work ● Onwards and upwards	**Getting on and Falling out** ● Together everyone achieves more ● Communicate ● Compromise and collaborate ● Care ● Unkind behaviour ● Shared responsibilities	**Changes** ● Me, My Body, My Health ● Emotional Wellbeing ● Life cycles ● Personal relationships ● Keeping safe ● Living in the wider world ● Becoming top of the school - responsibility
RSHE	Unit 1 – Religious Understanding - Calming the Storm Unit 2 – Me, My Body, My Health - Gifts and Talents - Girls' Bodies - Boy's Bodies - Spots and Sleep Unit 3 – Emotional Well-Being - Body Image - Peculiar Feelings - Emotional Changes - Seeing Stuff Online Unit 4 – Life Cycles - Making Babies (Part 1)		Unit 1 – Religious Understanding - Is God Calling You? Unit 2 – Personal Relationships - Under Pressure - Do You Want a Piece of Cake? - Self-Talk Unit 3 – Keeping Safe - Sharing isn't always Caring - Cyber Bullying - Types of Abuse - Impacted Lifestyles - Making Good Choices - Giving Assistance		Unit 1 – Religious Understanding - The Trinity - Catholic Social Teaching Unit 2 – Living in the Wider World - Reaching Out	

	- Making Babies (Part 2) - Menstruation - A Time for Everything (Bereavement)					
Languages (KS2 only)	**Language Angels Online.** Weekly French Lesson. Phonetics lesson 3 & Do You Have a Pet?	**Language Angels Online.** Weekly French Lesson. What Is the Date?	**Language Angels Online.** Weekly French Lesson. The Weather	**Language Angels Online.** Weekly French Lesson. Habitats or Romans	**Language Angels Online.** Weekly French Lesson. The Weekend	**Language Angels Online.** Weekly French Lesson. World War II, Habitats or Planets
Curriculum visits/ visiting workshop Please state theme and curriculum areas.		National Space Centre		Alton Castle Residential		