

RGS Junior School
Year 5
Programmes of Study
2019-2020



“One School, One Team.”

Year 5 Programmes of Study.

Welcome to Year 5. This offers a new challenge for all of our students, some moving across from Lambton House into Brandling House, some starting at the RGS for the first time. We hope to make this a year to remember both in and out of the classroom, with a range of activities and events, including the residential trip to Robinwood Activity Centre.

Below you will find some guidance as to the work which will be covered over the course of Year 5. As you would imagine, we are always keen to take advantage of opportunities that may present themselves at different times during the year which will further enhance learning within the year group (for example: the offer of an author visit or reacting to events in the region or the world around us) and **this means that there may be some changes to the plans below.**



Year 5 English			
	Autumn Term	Spring Term	Summer Term
Writing	Story planning & writing, Developing characters and settings, Descriptive writing, Cinquain poems, Formal letter writing (persuasive), Play scripts.	Instructional texts, Descriptive writing, Non-chronological report – comparative, Poetry writing (simile quilts), Story writing, Diary writing.	Persuasive writing – radio adverts, Historical event-recount, Extended writing project.
Grammar & Language	Revision of punctuation from Y4, Adjectives & adverbs, Connectives, Verbs: function & tenses, Standard & non-standard English; Commas in lists and sentences, parenthetic commas & commas to clarify ambiguity.	Paragraphs, Figurative language (SMOPA), Apostrophes (omission & possession), Relative pronouns, Adverbs, Speech, Singular & plural.	Auxiliary verbs, Main & subordinate clauses, Relative clauses, Prepositions, Proof-reading for grammatical errors. Modal verbs, Dashes & brackets.
Comprehension	Work from selected comprehension text books. Developing ability to answer questions in more detail; Developing skills to answer questions more independently.		
Reading	Independent reading of fiction, non-fiction & poetry books; Shared reading of the class novel, including reading aloud; Reading for meaning & understanding; Class reading of a variety of different novels.		

Year 5 Maths		
Autumn Term	Spring Term	Summer Term
Numbers and sequences to 1 million Place value Ordinal numbers Estimating and rounding Mental arithmetic skills - doubles & near doubles Addition of 2/3/4 digit numbers Subtraction of 2/3/4 digit numbers Using and applying addition and subtraction Length and perimeter Properties of 2 D shapes linked to symmetry Reflective symmetry Multiplication and division using doubles, near doubles and halves Times tables to 10 x 10, then beyond Know the first 20 prime numbers Use vocabulary such as primes, prime factors and composite numbers Understand square and cube numbers	Multiplication - mental strategies Written multiplication and division Using and applying multiplication - calculator Area Division - short method using remainders Rounding after division Fractions - equivalence Fractions - ordering & comparing Decimals - + and – mental strategies Decimals - standard written method + and – Negative numbers Number properties- sequences/ multiples/ factors Reflective symmetry Translations using co-ordinates Angles - position and movement Fractions - add and subtract those with common denominators Understand mixed numbers and multiply them by whole numbers	Types of angles - measuring and calculating Percentages - link to fractions and decimals. Percentages - relationship to a whole Percentages of numbers Exam revision as required Time - 24 hour clock: durations, using and applying - time tables Solving time problems Data handling (Tally / Frequency / Bar / Pie Charts/ Line) Using 360° protractors Measuring / estimating length Calculate the mean average Understand and use decimals up to 3 places Write percentages as fractions and fractions as decimals

Year 5 Science		
Autumn Term	Spring Term	Summer Term
<p>Changing Sounds Sounds are made when objects or materials vibrate; vibrations from sound sources travel through different materials; pitch – how it can be changed; volume – how it can be changed; investigate how to change the pitch and volume of a range of instruments; the speed of sound in different materials; the structure of the ear and how sound is heard; how we can protect ears, soundproofing materials; echoes and echo-location</p> <p>Gases around us The differences between solids, liquids and gases – their properties; uses of gases; air has mass and is all around us; the range of gases in air; powders and sponges are solid materials with air in the ‘gaps’ in between; measure volumes of water carefully; compare the air trapped in different materials; fair testing; gases are formed when liquids evaporate; gases flow more easily than liquids and in all directions.</p> <p>Changing state The states of matter reviewed; evaporation; everyday examples of ‘drying’ in terms of factors affecting evaporation</p>	<p>Changing State (continued) Condensation; air contains water vapour and when this hits a cold surface it may condense; the states of water; the water cycle.</p> <p>Keeping Healthy Diet, food nutrition labels; the heart and lungs are protected by the ribs; what the heart is made from; the role of the heart & blood vessels; pulse rate; we need exercise to stay healthy; effects of exercise on pulse rate; how drugs can affect the way the body functions and how these effects can be harmful; medicines; overdose.</p> <p>Life cycles Types of plant; germination; the functions of the roots, stem and leaves; photosynthesis;</p>	<p>Life cycles (continued) Parts of the flower; pollination – insect and wind; fertilisation; seed formation; seed dispersal; the life cycle of a flowering plant; the life cycle of a butterfly, frog and human; gestation periods; extinction.</p> <p>Earth, Sun and Moon Planets in the Solar System; the Sun, Earth and Moon are approximately spherical; the relative sizes of the Sun, Moon and Earth; distances in space are large; orbits; daytime and night-time; why we have seasons; the Moon; phases of the Moon.</p>

Year 5 Geography		
Autumn Term	Spring Term	Summer Term
<p><u>Mapwork</u> 6 Figure References Using OS Symbols Select a map for purpose Aerial Maps Scale Contours Using an Atlas to Find Features Time Zones</p> <p><u>Physical Geography</u> Plate tectonics The Ring of Fire Volcanoes Causes of volcanoes Types of volcano The characteristics of volcanic activity Volcanic eruptions –Kilaueu, Hawaii and Mount St Helens, USA <u>Earthquakes</u> Features of an earthquake Chile earthquake, 2010 Using accounts to find information</p>	<p><u>USA</u> Locate major cities in the USA States of America Physical features of America Human geography of the USA Route 66 Independent research into an area of the USA</p>	<p><u>Coasts</u> Coastal environments What makes a coast? Headlands Bays Erosion of cliffs Caves, stacks and arches Erosion of the beach Sand and shingle Map work- satellite images</p> <p><u>Possible activities</u> Marsden Beach, South Shields St Mary’s Lighthouse, Whitley Bay</p>

Year 5 French		
Autumn Term	Spring Term	Summer Term
Numbers 30 to 70, Parts of the body, Saying how you feel & visiting the doctor.	Telling the time, School subjects, Daily routines, Cultural awareness.	Sports & hobbies, Rooms and furniture in the house.

Year 5 Computing		
Autumn Term	Spring Term	Summer Term
<p>Rules of Responsible use of Computers, iPad and the Internet</p> <p>Revision of word processing and e-mail. Pupils are encouraged to work at home to improve their typing skills and speed.</p> <p><u>We are tour guides</u> Creating QR codes to add to displays around school.</p> <p><u>We are advertisers –Creating a short film</u> In this unit, the pupils review existing adverts or promotional films (What is My RGS?), create a storyboard, shoot original footage, source other media and edit a final version of their movie.</p> <p><u>We are musicians</u> -Selecting instruments -Recording instruments -Edit the volume/copy/loop/split and edit each individual instrument.</p> <p><u>We are game developers (Programming)</u> <u>Coding Retro Games - Scratch Pac-Man</u> A unit that takes the children through the process of decomposing and then building the classic game of Pac-Man using Scratch.</p> <p>-Design and create a computer program for a computer game. -Create original artwork and sound for a game. -Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>E Safety focus in lesson starters using Think U know website.</p> <p><u>Digital Literacy and Citizenship</u> <u>Strong Passwords</u> Pupils learn how to create secure passwords in order to protect their private information and accounts online.</p> <p><u>Digital Citizenship Pledge</u> Pupils work together to outline common expectations in order to build a strong digital citizenship community. Each member of the class signs a We the Digital Citizens Pledge.</p>	<p>Reminder of e-safety key messages. Safer Internet Day: Tuesday 6th February "Create, connect and share respect: A better internet starts with you"</p> <p><u>How the internet works</u> -Understand how we view web pages on the Internet -Use search technologies effectively.</p> <p><u>Computer Networks</u> -Understand what HTML is and recognise HTML tags. -Know a range of HTML tags and remix a web page.</p> <p><u>Web design</u> In this unit the children learn about the history of the web, before studying HTML (hypertext mark-up language), the language in which web pages are written. They learn to edit and write HTML, and then use this knowledge to create a web page. Research places to visit (link to World Cup). Email facts and research to friends. Produce website.</p> <p><u>Digital Literacy and Citizenship</u> <u>How to Cite a Site</u> Pupils reflect on the importance of citing all sources when they do research. They then learn how to write bibliographical citations for online sources.</p> <p><u>You've Won a Prize</u> Pupils learn what spam is, the forms it takes, and then identify strategies for dealing with it.</p>	<p><u>We are cryptographers</u> Cracking Codes The pupils learn more about communicating information securely through an introduction to cryptography (the science of keeping communication and information secret). They investigate early methods of communicating over distances, learn about two early ciphers, and consider what makes a secure password.</p> <p><u>Raspberry Pi:LED light shows</u> A unit to introduce your students to physical computing with a Raspberry Pi. Learn how to build simple circuits with LEDs and program them to create light shows using Scratch GPIO.</p> <p><u>Digital Literacy and Citizenship</u> <u>Picture Perfect</u> Pupils learn how photos can be altered digitally. They will consider the creative upsides of photo alteration, as well as its power to distort our perceptions of beauty and health.</p>

Year 5 PSHE/Religious Education		
Autumn Term	Spring Term	Summer Term
<p>Differences Different cultures Racism Rumours and name-calling Types of bullying Does money matter? Celebrating difference across the world</p> <p>Religion: Islam Theme: Beliefs and Practices Key Question: What is the best way for a Muslim to show commitment to God?</p>	<p>Healthy me Smoking Alcohol Emergency aid Body image My relationship with food Healthy me</p> <p>Religion: Judaism Theme: Passover Key Question: How important is it for Jewish people to do what God asks them to do?</p>	<p>Relationships Recognising me Getting on and falling out Girlfriends and boyfriends Relationships and technology Operation Ouch</p> <p>Religion: Buddhism Theme: Buddha's teachings Key Question: Is it possible for everyone to be happy?</p>

Year 5 Drama		
Autumn Term	Spring Term	Summer Term
<p>Drama Tools and Skills A Christmas Carol: Script Work</p>	<p>Romeo and Juliet</p>	<p>Radio Play BBC Audio: Archie Dobson's War</p>

Year 5 D & T		
Autumn Term	Spring Term	Summer Term
<p>Textiles - Slippers</p>	<p>Wood work and control-Controllable Vehicles</p>	<p>Food Technology - Bread</p>

Year 5 History		
Autumn Term	Spring Term	Summer Term
<p><u>An Introduction to History</u> The importance of dates Timelines Anachronisms Sources - written, images, artefacts, oral Being a historical detective</p> <p><u>Riotous Royalty</u> William the Conqueror and the Norman Invasion King John and the Magna Carta Henry VIII Elizabeth I Queen Anne Queen Victoria The Windsors</p>	<p><u>The History of the RGS (Local Study)</u> The founding of the RGS What clues are there about the history of the RGS around us? The various sites of the RGS The names of the houses - Collingwood, Eldon, Horsley and Stowell Key events in the history of the school Bessie Surtees The Victorian era of the RGS</p> <p>The Victorians and the development of the railway</p> <p><u>Possible Activities</u> Walking Tour of Newcastle St Nicholas' Cathedral, Newcastle Bessie Surtees House, Newcastle Beamish Museum, Beamish</p>	<p><u>The Shang Dynasty of China</u> What was the Shang Dynasty? Archaeological Evidence Kings of the Dynasty Royal Tombs Fu Hao Everyday Life Early Writing The First Calendar The Zhou Army The End of the Shang Dynasty</p> <p><u>Possible Activities</u> Great North Museum, Newcastle</p>

Year 5 Art			
Term	Autumn Term 1	Spring Term 1	Summer Term 1
Topic	Tudor Art	Victorian Art	Drawing Fun through expressionism
Painting		Great artist study: L.S Lowrie	Great artist study: Kandinsky
Drawing	Tudor houses	Great illustrator study: Lewis Carroll Victorian silhouettes	Memory drawings Favourite things Drawing games Pen and ink drawings
Sculpture	Tudor houses		
Textiles	Tudor Roses Mixed media Kings and Queens Class piece of Henry the 8 th		
Digital Media		William Morris: Moving wallpaper on I can Animate	Drawing on an iPad
Art Appreciation	American Gothic	LS Lowry	

Year 5 Music		
Autumn Term	Spring Term	Summer Term
<p>Notation (- introduced and used within the projects as and when it is useful): Symbols used in Y3 and 4, plus: Graphic Scores; notation used on own instruments (- guitar tabs, chord symbols etc)</p>		
<p>Pop!</p> <p>Students will be introduced to pop music through three big influences – Queen, Abba, The Beatles. They will extend their rhythmic understanding, especially of semi-quavers and reinforce their understanding of how pitched notes appear on a staff.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> • Pitched notes on a staff • Note value <p>Carol Service preparation.</p> <p>Year-Group, whole Y5/6 and congregational carols are learnt.</p> <p>Developing performance skills:</p> <ul style="list-style-type: none"> • For a specific place, • For a specific occasion, <p>Developing singing skills:</p> <ul style="list-style-type: none"> • Accuracy, • Expression, • Physical presentation. 	<p>Exploring notation</p> <p>Using Benjamin Britten's <i>The Storm</i>, students will describe how the music makes them feel and what it makes them think of, due to the instrumentation (timbre), dynamics and tempo. Graphic scores of the music will be made culminating in a whole class composition of a storm</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> • How to use tempo, dynamics, pitch, beat, rhythm, articulation, texture, timbre to create an overall effect • Graphic scores and standard notation 	<p>Preparation of musical play.</p> <p>Songs are learnt; elements of staging a play explored in detail through examples and own work.</p> <p>Musical and dramatic concepts explored:</p> <ul style="list-style-type: none"> • Music for a specific purpose, • Musical, visual and dance representation of Place, Event and Setting, • Theatre company composition and duties involved. <p>Performance.</p> <p>This half term will concentrate on getting the musical play ready for performance, which will include:</p> <ul style="list-style-type: none"> • Preparation of props, costumes, posters, programmes, tickets • Rehearsal.

Year 5 Physical Education		
Autumn Term	Spring Term	Summer Term
Gymnastics Development of pair and group routines with acrobatic movements	Basketball Introduction of the game by use of bench ball. Passing techniques and the start of the dribble.	Short Tennis Development of game play introducing shot strategies.

Year 5 Games		
Autumn Term	Spring Term	Summer Term
General Fitness. Boys. Rugby. Handling and running skills, contact, continuity and set piece. Under NROP Girls. To half term, netball. Better understanding of High 5, possession, passing, footwork and shooting. After half term, hockey. Use of correct footwork, to receive the ball and pass the ball; tackling, shadowing, and safety.	Cross-country, long distance, interval training, steps work. Boys to half term, Girls after half term: Football. The pupils should play games in which they are in established positions Hockey switch. Girls. Netball. Development of skills through play. Hockey. Pupils are able to control and choose the direction of a push pass. Pupils are able to use their developing dribbling skills to approach players and are aware of the timing to beat players. Athletics. Looking at the basics of the run, jump and throw.	Boys and Girls. Athletics. The pupils are given more specialised instruction in certain athletic events. Boys. Cricket. More emphasis on batting and bowling technique. Girls. Rounders. More work done with rounders ball with emphasis on fielding and throwing.

Year 5 Swimming		
Autumn Term	Spring Term	Summer Term
ASA Personal Survival Level 1 stroke development survival skills diving introduction of water polo skills starts and turns speed swimming and endurance swimming	A continuation of: ASA Personal Survival Level 1 stroke development survival skills diving introduction of water polo skills starts and turns speed swimming and endurance swimming	Further development of: ASA Personal Survival Level 1 stroke development survival skills diving introduction of water polo skills starts and turns speed swimming and endurance swimming