

RGS Junior School  
Year 5  
Programmes of Study  
2015-2016



*“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

Year 5 English			
	Autumn Term	Spring Term	Summer Term
<b>Writing</b>	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.
<b>Grammar &amp; Language</b>	Revision of punctuation from Y4, Adjectives & adverbs, Connectives, Verbs: function & tenses, Standard & non-standard English; Commas in lists and sentences, parenthetical 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.
<b>Comprehension</b>	Work from selected comprehension text books. Developing ability to answer questions in more detail; Developing skills to answer questions more independently.		
<b>Reading</b>	Independent reading of fiction, non-fiction & poetry books; Group reading in class, 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><b>Changing Sounds</b> 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><b>Gases around us</b> 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><b>Changing state</b> The states of matter reviewed; evaporation; everyday examples of ‘drying’ in terms of factors affecting evaporation</p>	<p><b>Changing State</b> (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><b>Keeping Healthy</b> Diet, food nutrition labels; the heart and lungs are protected by the ribs; what the heart is made from; the role of the heart &amp; 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><b>Life cycles</b> Types of plant; germination; the functions of the roots, stem and leaves; photosynthesis;</p>	<p><b>Life cycles</b> (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><b>Earth, Sun and Moon</b> 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 Latitude and Longitude</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</p> <p><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><b>Rules of Responsible use of Computers, iPad and the Internet</b></p> <p><b>Revision of word processing and e-mail.</b> Pupils are encouraged to work at home to improve their typing skills and speed.</p> <p><b>Book Creators</b> -Create an e-book using iPad app Book Creator. -Combine text and graphics. -Add audio to book.</p> <p><b>We are musicians</b> -Selecting instruments -Recording instruments -Edit the volume/copy/loop/split and edit each individual instrument.</p> <p><b>We are cryptographers</b> 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><b>E Safety focus in lesson starters using Think U know website.</b></p> <p><b>Digital Literacy and Citizenship</b> <b>Strong Passwords</b> Pupils learn how to create secure passwords in order to protect their private information and accounts online.</p> <p><b>Digital Citizenship Pledge</b> 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><b>Reminder of e-safety key messages.</b> <b>Safer Internet Day: Tuesday 9<sup>th</sup> February</b></p> <p><b>How the internet works</b> -Understand how we view web pages on the Internet -Use search technologies effectively.</p> <p><b>Internet Research</b> Research places to visit (link to Olympics). Email facts and research to friends. Produce website/presentations.</p> <p><b>All the fun of the fair</b> In this unit the pupils will be making logos; manipulating data in spreadsheets and using Lego WeDo to control fun fair rides.</p> <p><b>Digital Literacy and Citizenship</b> <b>How to Cite a Site</b> 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><b>You've Won a Prize</b> Pupils learn what spam is, the forms it takes, and then identify strategies for dealing with it.</p>	<p><b>We are game developers (Programming)</b> -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><b>Digital Literacy and Citizenship</b> <b>Picture Perfect</b> 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 PDS		
Autumn Term	Spring Term	Summer Term
Relationships: Managing and maintaining relationships  What is Belief?	Health and Wellbeing: Growing and changing  Code Breaking: Belief through symbols and stories	Living in the Wider World: A diverse society  What do people believe about God?

### Year 5 Drama

Autumn Term	Spring Term	Summer Term
<p><b><u>Movement, mime and improvisation</u></b> Children will continue to build confidence on stage by improvising a range of scenarios. They will use their body to show how people move differently and portray a range of characters by using voice and expression. They will be able to alter their physicality to show different emotions. Children will build on improvisations to create pieces of drama and devise and perform stories with their peers. They will give constructive feedback to their classmates.</p> <p><b><u>Television and Film</u></b> Children will devise a simple drama piece or news report in order to be filmed. They will build on an improvisation with their peers, thinking about where to move for the camera. By using an iPad they will take turns to film and perform. To gain more understanding, they will identify similarities and differences between film/TV scripts and theatre scripts. Students will explain why different camera angles may be used for different purposes and compare film and TV clips.</p>	<p><b><u>Playwriting and Distinguished Actors</u></b> Children will analyse scripts and identify script conventions. They will choose an actor to research and make a presentation about their life. They will share their work with the class and deliver a presentation confidently and articulately. Children will write a short script for the Sky Blue Theatre Company Playwriting Competition.</p> <p><b><u>The Victorians (cross curricular with history topic)</u></b> Children will use mime to show the job and the conditions of jobs in Victorian times. They will identify differences between ways of life at different times and consider the point of view of an audience when presenting a scene. By focusing on tone of voice and posture, children will represent status through movement. They will use a script stimulus to create drama and explore possible approaches to a script as an actor.</p>	<p><b><u>Summer Production</u></b> Children will work as the 'RGS Theatre Company' in order to collaboratively produce the school summer production. Alongside their music lessons, children will work in drama lessons to distribute parts, decide on roles and rehearse for the show. They will gain an all-round knowledge of people involved in theatre and some students will learn about LFX and SFX in more detail. Others will look at costume and set design; everyone will be involved as a team. Children will evaluate their performance and give positive feedback to their peers.</p>

### Year 5 D & T

Autumn Term	Spring Term	Summer Term
<b>Structures</b> - Musical Instruments	<b>Food Technology</b> - Bread	<b>Textiles</b> - Slippers

### Year 5 History

Autumn Term	Spring Term	Summer Term
<p><b><u>An Introduction to History</u></b> The importance of dates Timelines Anachronisms Sources - written, images, artefacts, oral Being a historical detective</p> <p><b><u>The Tudors</u></b> Henry VII The Battle of Bosworth Field Henry VIII and His Six Wives Lady Jane Grey Elizabeth I The Spanish Armada</p>	<p><b><u>The History of the RGS (Local Study)</u></b> 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><b><u>The Victorians</u></b> Comparing Victorian schooling to now 1870 Education Act Children and Factory Life</p> <p><b><u>Possible Activities</u></b> Walking Tour of Newcastle St Nicholas' Cathedral, Newcastle Bessie Surtees House, Newcastle Beamish Museum, Beamish</p>	<p><b><u>The Shang Dynasty of China</u></b> 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><b><u>Possible Activities</u></b> Great North Museum, Newcastle</p>

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

Year 5 Music Programme of Study 2015-16		
Autumn Term	Spring Term	Summer Term
<p><b>Notation</b> (- 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><b>Contrasts.</b></p> <p>Performances to show a single type of contrast are prepared, then performances based on contrasting poems are created making use of suitable musical contrasts to enhance the mood of the words.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> <li>• Contrasts in tempo, dynamics, pitch, beat, rhythm, articulation, texture, timbre,</li> <li>• Sound and silence.</li> </ul> <p><b>Carol Service preparation.</b></p> <p>Year-Group, whole Y5/6 and congregational carols are learnt.</p> <p>Developing performance skills:</p> <ul style="list-style-type: none"> <li>• For a specific place,</li> <li>• For a specific occasion,</li> </ul> <p>Developing singing skills:</p> <ul style="list-style-type: none"> <li>• Accuracy,</li> <li>• Expression,</li> <li>• Physical presentation.</li> </ul>	<p><b>Music round the world.</b></p> <p>Examples of music from various countries and cultures are heard, sung and played by the class.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> <li>• Culture-specific instruments, genres and styles,</li> <li>• Call and response, drone, ostinato, ornamentation,</li> <li>• Music for specific occasions.</li> </ul> <p><b>Graphic Scores.</b></p> <p>Groups will explore Graphic notation through seeing and hearing examples, performing from one, and ultimately composing their own piece notated in this way. "BBC 10 Pieces" resources on Handel's "Zadok the Priest" may be useful supplementary material.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> <li>• Score-following</li> <li>• Symbol-interpretation</li> <li>• Diagrammatic notations</li> <li>• Structure</li> </ul>	<p><b>Preparation of musical play.</b></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"> <li>• Music for a specific purpose,</li> <li>• Musical, visual and dance representation of Place, Event and Setting,</li> <li>• Theatre company composition and duties involved.</li> </ul> <p><b>Performance.</b></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"> <li>• Preparation of props, costumes, posters, programmes, tickets</li> <li>• Rehearsal.</li> </ul>

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

Year 5 Games		
Autumn Term	Spring Term	Summer Term
General Fitness.  <b>Boys.</b> <b>Rugby.</b> Handling and running skills, contact, continuity and set piece. Under NROP <b>Girls.</b> To half term, <b>netball.</b> Better understanding of High 5, possession, passing, footwork and shooting. After half term, <b>hockey.</b> Use of correct footwork, to receive the ball and pass the ball; tackling, shadowing, and safety.	Cross-country, long distance, interval training, steps work.  <b>Boys to half term, Girls after half term:</b> <b>Football.</b> The pupils should play games in which they are in established positions Hockey switch. <b>Girls.</b> <b>Netball.</b> Development of skills through play. <b>Hockey.</b> 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. <b>Athletics.</b> Looking at the basics of the run, jump and throw.	<b>Boys and Girls.</b>  <b>Athletics.</b> The pupils are given more specialised instruction in certain athletic events.  <b>Boys.</b> <b>Cricket.</b> More emphasis on batting and bowling technique. <b>Girls.</b> <b>Rounders.</b> 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