

RGS Junior School  
Year 5  
Curriculum  
2020-2021



*“One School, One Team.”*

## Year 5 Curriculum

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 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 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, Invitations; Poetry writing (simile quilts), Story writing, Diary writing.	Persuasive writing – radio adverts, Further development of descriptive writing; Extended writing project.
<b>Grammar &amp; Language</b>	Revision of punctuation from Y4, Revision of word types from Year 4, Pronouns and relative pronouns, Verbs: function and tense agreement, Adjectives and adverbs, Show don't tell: adventurous vocabulary, Main and subordinating clauses,	Connectives, Standard and non-standard English, Auxiliary and modal verbs, Relative clauses, Brackets and dashes for parenthesis, Commas for parenthesis, Singular and plural, Sentence openers,	Figurative language (SMOPA), Apostrophes for possession and omission, Prepositions, Proof-reading for grammatical errors, Relative pronouns, Revision and recap of year and consolidation of previous learning

	Commas in lists and sentences, Figurative language (SMOPA)	Paragraphs, Speech layout and punctuation	
<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; Shared reading of the class novel, including reading aloud; Reading for meaning & understanding; Class reading of a variety of different novels.		

<b>Year 5 Science</b>		
<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<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>

<b>Year 5 Geography</b>		
<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<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</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>

Volcanic eruptions –Kilaueu, Hawaii and Mount St Helens, USA <u>Earthquakes</u> Features of an earthquake Chile earthquake, 2010 Using accounts to find information		
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Year 5 History		
Autumn Term	Spring Term	Summer Term
<u>An Introduction to History</u> The importance of dates Timelines Anachronisms Sources - written, images, artefacts, oral Being a historical detective  <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	<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  The Victorians and the development of the railway  <u>Possible Activities</u> Walking Tour of Newcastle St Nicholas' Cathedral, Newcastle Bessie Surtees House, Newcastle Beamish Museum, Beamish	<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  <u>Possible Activities</u> Great North Museum, Newcastle

Year 5 French		
Autumn Term	Spring Term	Summer Term
Revision of basic questions from Y3 Numbers 30 to 70, Colours, Parts of the body,	Telling the time, School subjects,	Sports & hobbies;

Year 5 Spanish		
Autumn Term	Spring Term	Summer Term
Recap basic questions from Y4 Colours Petr Christmas project	Family Parts of face Picasso descriptions	Food and drink Recap of numbers 0-99

Year 5 PSHE/Religious Education		
Autumn Term	Spring Term	Summer Term
<b>Living in the Wider World</b> Different cultures Racism Rumours and name-calling Types of bullying Does money matter? Celebrating difference across the world	<b>Relationships</b> Recognising me Getting on and falling out Girlfriends and boyfriends Relationships and technology Relationships and technology	<b>Health and Wellbeing</b> Smoking Alcohol Emergency aid Body image My relationship with food Healthy me

<p><b>Religion:</b> Islam  <b>Theme:</b> Beliefs and Practices  <b>Key Question:</b> What is the best way for a Muslim to show commitment to God?</p>	<p><b>Religion:</b> Judaism  <b>Theme:</b> Passover  <b>Key Question:</b> How important is it for Jewish people to do what God asks them to do?</p>	<p><b>Religion:</b> Buddhism  <b>Theme:</b> Buddha's teachings  <b>Key Question:</b> Is it possible for everyone to be happy?</p>
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Year 5 Drama		
Autumn Term	Spring Term	Summer Term
Drama Tools and Skills Pantomime	Romeo and Juliet	Lion the Witch and the Wardrobe Matilda

Year 5 Computing		
Autumn Term	Spring Term	Summer Term
<p><b>Rules of Responsible use of computers, iPad and the Internet.</b>  <b>Digital Learning Acceptable User Agreement</b></p> <p><b>Interland Virtual Assembly</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>Office 365</b>  Reminders of how to use Teams.  Introduction to Class Notebook and assignments.</p> <p><b>All pupils need Teams and Office Lens downloaded on a device at home please.</b></p> <p><b>Computational Thinking</b>  Throughout this half term, we will also focus on computational thinking skills in lesson starters, in preparation for the Bebras competition in November.</p> <p><b>Internet Safety</b>  In this topic, children learn about the fundamentals of digital safety and citizenship.</p> <p><b>Digital safety focus – online reputation</b></p> <p><b>Strong Passwords</b>  Pupils learn how to create secure passwords in order to protect their private information and accounts online.</p> <p><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>	<p><b>Reminder of digital safety key messages. Safer Internet Day will be on the 9th February 2021 in the UK with the theme: An internet we trust - exploring reliability in the online world.</b></p> <p><b>Digital safety focus - self-image and identity</b></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>Computer Networks</b>  -Understand what HTML is and recognise HTML tags.  -Know a range of HTML tags and remix a web page.</p> <p><b>Web design</b>  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. Email facts and research to friends. Produce website.</p>	<p><b>Reminder of digital safety key messages.</b></p> <p><b>We are game developers (Programming) Coding Retro Games - Scratch Pac-Man</b>  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><b>Digital safety focus -health, well-being and lifestyle</b></p> <p><b>We are advertisers –Creating a short film</b>  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>

Year 5 Music		
Autumn Term	Spring Term	Summer Term
<p><b>Pop!</b> Children will begin by revising their knowledge and understanding of standard notation before focussing on semiquavers.</p> <p>Children 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 stave.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> <li>• Pitched notes on a stave</li> <li>• Note value</li> <li>• Semiquaver focus</li> </ul> <p><b>Carol Service preparation.</b></p> <p>Carols are learnt in preparation for the Y5/6 Carol Concert.</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>Descriptive Music</b></p> <p>Using Vivaldi's <i>The Four Seasons</i>, children will build on their knowledge of descriptive music from last year and learn how music can be used to describe weather conditions and climates. Children will describe how the music makes them feel and what it makes them think of, due to the instrumentation, sonority, dynamics and tempo.</p> <p>Children will perform a short extract from both <i>Autumn</i> and <i>Winter</i> showing awareness of dynamics and harmony and following a standard score.</p> <p>Children will also compose and perform their own weather inspired pieces.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> <li>• How to use tempo, dynamics, pitch, beat, rhythm, articulation, texture, timbre to create an overall effect</li> <li>• Graphic scores and standard notation</li> </ul>	<p><b>Music Technology</b> To experiment with sound technology and build musical loop patterns using Garage Band.</p> <p><b>Music from the continent of Africa</b></p> <p>An introduction to the features of music from different countries in Africa, focussing on drumming techniques, rhythmic patterns and instrumentation. We will also look at fusion music.</p> <p>Musical concepts explored:</p> <ul style="list-style-type: none"> <li>• Pentatonic scale</li> <li>• Instrumentation</li> <li>• Rhythmic patterns</li> <li>• Fusion music</li> </ul>

Year 5 Art			
Term	Autumn Term 1	Spring Term 1	Summer Term 1
<b>Topic</b>	Fairy Art	Victorian Art	Drawing Fun through expressionism
<b>Painting</b>	Artist Study: Cicely Mary Barker Watercolour	Great artist study: L.S Lowry	Great artist study: Kandinsky
<b>Drawing</b>	Artist Study: Brian Froud	Great illustrator study: Lewis Carroll Victorian silhouettes	Memory drawings Favourite things Drawing games Pen and ink drawings
<b>Sculpture</b>	Clay Fairy House Fairy Garden		
<b>Textiles</b>			
<b>Digital Media</b>		William Morris: Moving wallpaper on I can Animate	Drawing on an iPad
<b>Art Appreciation</b>		LS Lowry	American Gothic

Year 5 D & T		
Autumn Term	Spring Term	Summer Term
Textiles - Slippers	Woodwork and Electronics-Controllable Vehicles	Food Technology – Baking Bread

Year 5 Physical Education		
Autumn Term	Spring Term	Summer Term
<p><b>Fundamental skills</b> Introduction to functional movement. Every lesson will allow children to develop their locomotion, manipulation and stabilisation skills (fundamental movement skills) Lesson focus on agility, balance, speed, strength and coordination.</p> <p><b>Gymnastics.</b> Basic shapes, jumps, rolls. Body control. Vaulting on box, shapes and landing.</p>	<p><b>Dance</b> Perform dances using a range of movement patterns. Learn and create dance routines. House dance competition.</p> <p><b>Ball skills</b> Focus on ball familiarisation. Develop catching, passing, dribbling and striking. Development of invasion, game play and positioning. Tactical play and decision making.</p>	<p><b>Athletics</b> Developing skills in a variety of jumps, runs, throws focussing on correct technique and fundamentals.</p> <p><b>Short tennis:</b> Familiarisation of racket, grip and balance Emphasis on basic stroke play. Introduction to competition.</p>

Year 5 Games		
Autumn Term	Spring Term	Summer Term
<p>General fitness.</p> <p><b>Boys.</b></p> <p><b>Cricket:</b> Development of catching, throwing, fielding, bowling and striking. Introduction to game play and decision making. Introduction to scenario batting, fielding pressure and variety in bowling.</p> <p><b>Rugby.</b> Introduce the game of rugby through contact. Ball familiarisation. Focus on basic catching, passing, traveling and invasion. Handling and running skills, contact, continuity and set piece. Under NROP</p> <p><b>Girls.</b></p> <p><b>Hockey.</b> Understanding of basic passing techniques, rules of the game through play. Use of correct footwork, to receive the ball and pass the ball; tackling, shadowing, and safety.</p> <p><b>Football.</b> Ball familiarization, simple passing, shooting and dribbling skills General Fitness.</p>	<p>Cross-country, long distance, interval training, steps work.</p> <p><b>Boys.</b></p> <p><b>Football.</b> Ball familiarization, range of passing, shooting and dribbling skills. Identification of space and control through small sided games. Introduction to style of play. Positional play.</p> <p><b>Hockey.</b> Understanding of basic passing techniques, rules of the game through play. Use of correct footwork, to receive the ball and pass the ball; tackling, shadowing, and safety.</p> <p><b>Girls.</b></p> <p><b>Netball.</b> Sending and receiving, maintaining possession. Positional and invasion play through games. Development of technique.</p>	<p><b>Boys and Girls.</b></p> <p><b>Athletics.</b> Focus on technical development in throwing, running and jumping events.</p> <p><b>Boys and Girls.</b> Cricket Game play, bowling to plans. Batting in scenarios. Field setting and ground fielding work.</p>

Year 5 Swimming		
Autumn Term	Spring Term	Summer Term
<p>ASA Personal Survival Level 1 stroke development survival skills diving introduction of water polo skills starts and turns speed swimming and endurance swimming</p>	<p>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</p>	<p>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</p>