

Rural Church Schools Academy Trust

Year 5 Curriculum



Year: 5

Class teacher: Jo Gabriel



'Let your Light Shine.' Matthew 5v16

RCSAT Curriculum Overview



Curriculum Overview 2021



LET YOUR LIGHT SHINE Matthew v5:16

Article 29: Children's education should develop each child's personality, talents and abilities to the fullest. It should encourage children to respect others, human rights and their own and other cultures. It should also help them learn to live peacefully, protect the environment and respect other people.

Our Curriculum Policy details our intent behind our curriculum, how we implement it and our desired impact. At RCSAT, the school curriculum consists of all those activities designed or encouraged within its organisational framework to provide the intellectual, emotional, personal, social, spiritual and physical development of all its pupils. It includes not only the subject specific curriculum but also the 'informal' programme of enrichment and extra-curricular activities.

The curriculum at RCSAT, developed over a number of years, is firmly rooted in and stems directly from our Vision, Mission and Core Values;

Our Vision – **'Let your Light shine'** Matthew v5:16

Our Mission – **'A Caring Christian Family Where We Grow Together'**

Our Core Values – WE aim to create an enjoyable, inclusive, safe and nurturing environment that allows all children to develop spiritually, morally and socially. – *every child is a child of God, made to contribute to our world.*

WE aim to create an inspiring environment, which encourages enthusiasm for lifelong learning and establishes an expectation of high standards – *knowing the way, showing the way and going the way.*

WE aim to encourage caring, sensitive and inclusive attitudes where individuals feel secure, valued and respected by others. – *like Jesus showed us through his teachings*

WE aim to provide a broad and connected curriculum which challenges and develops the potential of each child – *as Jesus needed his disciples to support and guide, so we look to others with more knowledge*

WE aim to develop a positive relationship between home, school and our wider community- *as a family – as brothers and sisters.*

The RCSAT curriculum is designed to
Embody - the Christian values we live by
Enable – all children to flourish in mind, body and spirit
Ensure – that all pupils are given the experiences to 'Let their Light Shine.'

Reading	<ul style="list-style-type: none">Loving God, loving and accepting ourselves and loving and responding well to othersA joy of learningA peaceful classroom environmentKindness and generosity towards othersGentle interactionsPatience and understandingExcellent behaviour and positive attitudes	PSHE and Pastoral	Religious Education
Writing			Art
Spelling & Grammar	<p>The Fruit of the Spirit is Love, Joy, Peace, Patience, Kindness, Generosity, Faithfulness, Gentleness and Self control Galatians 5: 22-23</p>	<p>Love the Lord God with all your heart, with all your soul and with all your mind. Love your neighbour as yourself. Matthew 22: 36-40</p> <ul style="list-style-type: none">Positive relationshipsHigh levels of praiseLove and care for othersLearning from mistakesFostering a growth mindset & perseveranceEqual opportunity for all pupilsNurturing positive self-esteem	Design & Technology
Speaking			Computing & E-safety
Maths			Music
Science			Physical Education
History			Modern Foreign Languages
Geography			Early Years Curriculum
	Christian Distinctiveness		

Intent:

'Let your Light Shine.' Matthew 5v16

The schools within RCSAT are strongly committed to helping our children grow and develop the skills required to be successful in life. Our curriculum is designed to promote every child's individuality giving them the skills, knowledge and understanding to prepare them for the future. At RCSAT, our Connected Curriculum is planned around the development of Knowledge, Skills and Understanding. We ensure a curriculum that nurtures fascination and imagination and promotes an appreciation of creativity & individuality. One that also works in strong partnership with parents and carers to ensure high standards, engendering a strong sense of community, where all children and families are key to the delivery of a challenging, inspirational and innovative curriculum.

As a trust, we provide varied opportunities throughout their time with us, which promote independent, interactive and collaborative learning that builds on the children's natural curiosity and eagerness to learn. We teach children to aspire to be the best possible version of themselves through our key drivers.

Our key drivers are:

- Inspirational and connected curriculum which instils a love of learning
- Curiosity and appreciation of God's world through our Christian Values
- A culture of care for everyone in our community and in the world around us (RRSA, Global Learning, British Values)
- Aspiring to become the best person God created us to be – Let your light shine (Matthew 5:16)

Academic success comes through creativity and problem solving; responsibility and resilience, as well as physical development, well-being and mental health all being key elements in supporting the whole child through their learning journey.

Our curriculum also celebrates diversity and utilises the skills and knowledge of the community to enhance our curriculum while supporting the children's emotional and spiritual development.

Implementation:

Our curriculum is driven by a desire to develop the whole child and therefore delivers much more than just the National Curriculum. Our connected curriculum provides opportunities for the children to learn about managing themselves, relationships and situations.

Our curriculum is not simply a set of encounters from which children form ad hoc memories; it is designed to be remembered in detail – to be stored in our children's long-term memories so that they can later build on it, forming an ever wider and deeper pool of knowledge. Our curriculum is connected. It is planned vertically between year groups, horizontally within the academic year and diagonally to build on prior knowledge.

Autumn Term	Spring Term	Summer Term
Geography based enquiry	History based enquiry	STEM based enquiry
Central and South America	Ancient Greece	Space

Our connected curriculum stems from a key question linked to a specific concept which then underpins the children's learning. Knowledge around this concept is delivered through primary sources such as high-quality texts, music, art and technologies, enabling connections to be made across a range of National Curriculum subjects. Our teachers skillfully plan to ensure the children in their class experience a curriculum that inspires a love for learning.

Our curriculum is predominantly organised around rich and engaging, high-quality texts, making links and connecting to all curriculum areas where relevant. There is always an overarching text which connects the curriculum across the school. Beneath which sit key texts in each year group. Subject leads ensure progression and coverage of knowledge, skills and understanding are weaved into a meaningful and cohesive curriculum drawing in learning based on local, national and international events

Medium term plans outline the learning to take place for the term and are developed as mind maps using the phrases; As Artists, As Geographers, As Historians, As Writers, As Readers, As Mathematicians, As *'Let your Light Shine.'* Matthew 5v16

Musicians, As Programmers, As Designers, As Performers, As respectful, responsible citizens to frame ideas and concepts to be taught. The core basic skills of English and Maths are planned and delivered to reflect the National Curriculum 2014 changes and many elements of the new statutory orders are reflected in our practice.

We also feel that the following are necessary to support the implementation of our connected curriculum;

Learning Environment – We work hard to make sure that our learning environment supports the development of the whole child both inside, outside and beyond. Our classrooms are well organised and resourced allowing children to choose resources independently to support their learning.

Our outdoor areas have been developed to enhance our connected curriculum with developments such as: running paths, outdoor stage, mini woodland, outdoor reading provision, wilderness area and forest schools. This enables pupils to explore at break and lunch-times and gives teachers a range of resource to tap into to support teaching and learning at various points within the year.

Learning Partners – It is important that as a school we engage with external partner, locally, nationally and internationally to bring added dimensions to our curriculum offer. We partner with artists, musicians, coaches, poets, cultural organisations, engineers, other schools to bring expertise and difference to our curriculum offer. These may be short term projects over a few weeks or much longer endeavours. It is through these partnerships that we may light a spark of interest, enthusiasm and passion within our children that they may carry forward with them into their future lives and schooling.

New Pedagogies – As we continue to develop our curriculum, our approach to teaching and learning also develops. We take a blended learning approach where multiple disciplines will be touched upon within a lesson. It may be a 'Science' based lesson where problem solving, maths, literacy and art disciplines are enveloped within the taught session. Project based inquiry learning coupled with direct instruction ensure that our curriculum is relevant and provides children with opportunities to develop the skills of communication, collaboration, critical thinking, citizenship and creativity whilst also building their own character.

Impact:

Through our connected approach:

Our children will have the capacity to control and express their emotions, and handle interpersonal relationships whilst keeping themselves safe.

Our children will become confident and successful lifelong learners, demonstrating the Christian Values to ensuring they let their individual lights shine as they make the right choices about their learning.

Our curriculum has an ambition for high achievement of all pupils irrespective of their background or starting point.

Our curriculum promotes a love of learning.

The curriculum also includes those features which produce the school's ethos (i.e. the 'hidden curriculum') such as the quality of relationships and the values exemplified by the way the school sets about its task. Our aim is to provide a curriculum which will firstly expand the pupil's knowledge, experience and imaginative understanding, and thus his/her awareness of moral and Christian values and capacity for enjoyment, and secondly, enable the pupil to enter the world after formal education is over as an active participant in society and a responsible contributor to it, capable of achieving as much independence as possible.

There is an Act of Worship every day. Worship is a time where we come together to reflect on the school's vision and to learn about the '*person, love & work of Jesus*' which is central to the school's vision and curriculum. The daily Act of Worship promotes the Christian and Learning values which permeate the ethos of the school. As such, Worship is an essential part of the school day and the contributions of staff, pupils, clergy and other visitors are valued highly.

Year 5 Curriculum Topics

Subject area	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Geography based enquiry Central and South America		History based enquiry Ancient Greece		STEM based enquiry Space	
Geography	Use a study of Central and South America to study: Deforestation (Amazon) Plan a journey to a place in another part of the world. Use an atlas to name and locate mountainous regions (Andes), locate the Tropics of Cancer and Capricorn Fairtrade (bananas, cocoa, coffee) Tourism – Brazil (Amazon), Peru and the Inca Trail (Machu Picchu)		Describe and understand key aspects of human geography: including types of settlement, land use, economic trade and natural distribution of resources. Understand geographical similarities and differences through the study of human and physical geography of a region in Europe (Greece) or Africa.		Use an atlas to locate countries that have been involved in the development of space exploration (Russia, China, USA, India, countries in Europe). NASA (Florida) Plan a journey to Cape Canaveral for a visit to NASA (rocket launch), considering distance and time.	
History	A study of a non-European society (Inca and Mayan civilisations of South America) that provides contrast with British History.		Timeline of the key historical events in Ancient Greece. The achievements of the Ancient Greek civilisations and their influence on the Britain and the western world. Use research skills to find answers to specific historical questions about Ancient Greece. Compare Ancient Greece and modern-day Greece. British democracy and its roots in Ancient Greece. Explain how parliament affects decision making in England (links to Ancient Greek democracy).		A history of Space exploration. The Space Race Key historical lives of significant people - Galileo Galilei and Stephen Hawking.	
Science	Life Cycles	Animals and habitats	Changing Materials	Forces	Forces	Earth, Sun and Moon
Technology	Cooking and Nutrition (Food hygiene and safety)		Food technology – The History of Bread (Roberts Bakery)		Create Mechanical Systems - using a range of tools and equipment competently	

			Textiles - creating and sewing felt pyramids.	<ul style="list-style-type: none"> - making a prototype before making a final version - evaluate and make alternative plans. <p>Create and use sundials</p>
Computing	<p>Purple Mash Unit 5.2 Online safety</p> <p>Purple Mash Unit 5.1 Coding (2Code)</p> <p>Purple Mash Unit 5.4 Spreadsheets (2Calculate)</p>	<p>Purple Mash Unit 5.4 Databases (2Question, 2Investigate)</p>	<p>Purple Mash Unit 5.5 Game Creator (2DIY3D)</p>	<p>Purple Mash Unit 5.6 3D Modelling (2Design and Make)</p> <p>Use technology to control an external device - program Sphero and Big Track devices</p> <p>Use iMovie - a video editing software application – to edit a film</p>
Art	<p>Roy Lichtenstein and Romero Britto</p> <p>Research the work of these artists and use their work to represent the Pop Art style</p> <p>Express emotion in art (Romero Britto's 'positive vibe' art works</p>	<p>Frieda Kahlo or Diego Rivera or Georgia O'Keeffe</p> <p>Use shading to create mood and feeling</p> <p>Identify and draw objects and produce texture</p>	<p>Create accurate print designs of Ancient Greek repetitive patterns (such as the classic key pattern and mosaics)</p> <p>Drawing of historical Greek artefacts (ceramic art, Ancient Greek amphoras) using marks and lines to produce texture.</p> <p>Ancient Greek Olympic Games – organise line, tone, shape and colour to create artwork of athletes in motion.</p> <p>A study of classical Ancient Greek sculpture</p>	<p>Peter Thorpe – British Space artist Sun and Moon artwork (day and night)</p> <p>Artworks inspired by the book 'The Planet Gods'</p>
Music	<p>Music Express: Life cycles Focus: Structure Our Community Focus: Performance</p>	<p>Music Express: Celebration Focus: performance At the Movies Focus: Composition</p>	<p>Music Express: Solar System Focus: Listening Gustav Holst – The Planets Keeping Healthy Focus: Beat</p>	

The Vocabulary, Knowledge and Skills for Year 5 are delivered through the following topics and Curriculum content is taught across the year as shown:

	Autumn	Spring	Summer
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	Geography Based Learning Theme	History Based Learning Theme	STEM based Learning Theme
Umbrella Book			
Y5 Other texts/ Trips/ visitors			

A Year 5 Reader at RCSAT

Word Reading

- I can apply my knowledge of root words, prefixes and suffixes to read aloud and to understand the meaning of unfamiliar words.
- I can read further exception words, noting the unusual correspondences between spelling and sound.
- I attempt pronunciation of unfamiliar words drawing on prior knowledge of similar looking words.
- I can re-read and read ahead to check for meaning.

Comprehension

- I am familiar with and can talk about a wide range of books and text types, including myths, legends and traditional stories and books from other cultures and traditions. I can discuss the features of each.
- I can read non-fiction texts and identify the purpose, structure and grammatical features, evaluating how effective they are.
- I can identify significant ideas, events and characters; and discuss their significance.
- I can recite poems by heart, e.g. narrative verse, haiku.
- I can prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone, volume and action.
- I can use meaning-seeking strategies to explore the meaning of words in context.
- I can use meaning-seeking strategies to explore the meaning of idiomatic and figurative language.
- I can identify and comment on a writer's use of language for effect. for example, precisely chosen adjectives, similes and personification.
- I can identify grammatical features used by the writer (rhetorical questions, varied sentence lengths, varied sentence starters, empty words) to impact on the reader.
- I can draw inferences such as inferring characters' feelings, thoughts and motives from their actions.
- I can justify inferences with evidence from the text.
- I can make predictions from what has been read.
- I can summarise the main ideas drawn from a text.
- I can identify the effect of the context on a text; for example, historical context or other cultures.
- I can identify how language, structure and presentation contribute to the meaning of a text.

- I can express a personal point of view about a text, giving reasons.
- I can make connections between other similar texts, prior knowledge and experience.
- I can compare different versions of texts and talk about their differences and similarities.
- I can listen to and build on others' ideas and opinions about a text.
- I can present an oral overview or summary of a text.
- I can present the author's viewpoint of a text.
- I can present a personal point of view based on what has been read.
- I can listen to others' personal point of view.
- I can explain a personal point of view and give reasons.
- I know the difference between fact and opinion.
- I can use my knowledge of structure of text type to find key information.
- I can use text marking to identify key information in a text.
- I can make notes from text marking.

Greater Depth in Reading

- I can express opinions about a text, using evidence from the text, giving reasons and explanations. (Point, evidence, explanation)
- I can adapt my own opinion in the light of further reading or others' ideas.
- I can identify formal and informal language.
- I know the features of different narrative text types, for example, adventure, fantasy, myths.
- I can compare texts by the same writer.
- I can compare texts by different writers on the same topic.
- I can summarise key information from different texts.
- I can empathise with different characters' points of view.
- I can infer meaning using evidence from the text and wider reading and personal experience.
- I can explain how a writer's use of language and grammatical features have been used to create effects and impact on the reader.
- I can explain how punctuation marks the grammatical boundaries of sentences and gives meaning.
- I know how the way a text is organised supports the purpose of the writing.
- I can use scanning and text marking to find and identify key information.

A Year 5 Writer at RCSAT

Transcription

Spelling

- I can form verbs with prefixes.
- I can convert nouns or adjectives into verbs by adding a suffix.
- I understand the rules for adding prefixes and suffixes.
- I can spell words with silent letters.
- I can distinguish between homophones and other words which are often confused.
- I can spell the commonly mis-spelt words from the Y5/6 word list.
- I can use the first 3 or 4 letters of a word to check spelling, meaning or both in a dictionary.
- I can use a thesaurus.
- I can use a range of spelling strategies.

Handwriting

- I can choose the style of handwriting to use when given a choice.
- I can choose the handwriting that is best suited for a specific task.

Composition

- I can discuss the audience and purpose of the writing.
- I can start sentences in different ways.
- I can use the correct features and sentence structure matched to the text type we are working on.
- I can develop characters through action and dialogue.
- I can establish a viewpoint as the writer through commenting on characters and events.
- I can use grammar and vocabulary to create an impact on the reader.
- I can use stylistic devices to create effects in writing.
- I can add well-chosen detail to interest the reader.
- I can summarise a paragraph.
- I can organise my writing into paragraphs to show different information or events.

Year 5/6 Statutory Spelling List

accommodate	embarrass	persuade
accompany	environment	physical
according	equip (-ped, -ment)	prejudice
achieve	especially	privilege
aggressive	exaggerate	profession
amateur	excellent	programme
ancient	existence	pronunciation
apparent	explanation	queue
appreciate	familiar	recognise
attached	foreign	recommend
available	forty	relevant
average	frequently	restaurant
awkward	government	rhyme
bargain	guarantee	rhythm
bruise	harass	sacrifice
category	hindrance	secretary
cemetery	identity	shoulder
committee	immediate(ly)	signature
communicate	individual	sincere(ly)
community	interfere	soldier
competition	interrupt	stomach
conscience*	language	sufficient
conscious*	leisure	suggest
controversy	lightning	symbol
convenience	marvellous	system
correspond	mischievous	temperature
criticise (critic + ise)	muscle	thorough
curiosity	necessary	twelfth
definite	neighbour	variety
desperate	nuisance	vegetable
determined	occupy	vehicle
develop	occur	yacht
dictionary	opportunity	
disastrous	parliament	

Vocabulary, Grammar and Punctuation

Word

- I can convert **nouns** or **adjectives** into **verbs** using **suffixes** [for example, *-ate; -ise; -ify*]
- I can use **verb prefixes** [for example, *dis-*, *de-*, *mis-*, *over-* and *re-*]

Sentence

- I can use **relative clauses** beginning with *who*, *which*, *where*, *when*, *whose*, *that*, or an omitted relative pronoun
- I can indicate degrees of possibility using **adverbs** [for example, *perhaps*, *surely*] or **modal verbs** [for example, *might*, *should*, *will*, *must*]

Text

- I can use devices to build **cohesion** within a paragraph [for example, *then*, *after that*, *this*, *firstly*]
- I can link ideas across paragraphs using **adverbials** of time [for example, *later*], place [for example, *nearby*] and number [for example, *secondly*] or tense choices [for example, he *had* seen her before]

Punctuation

- I can use brackets, dashes or commas to indicate parenthesis
- I can use commas to clarify meaning or avoid ambiguity

Terminology

- modal verb, relative pronoun, relative clause, parenthesis, bracket, dash cohesion, ambiguity

Greater Depth in Writing

- I can use paragraphs to structure the plot in narrative writing, showing changes in time, place and events.
- I can use changes in time and place to guide the reader through the text.
- I can use paragraphs to organise information logically and shape a non-fiction text effectively.
- I can sustain and develop an idea within a paragraph, introducing it with a topic sentence.
- I can close text with reference to its opening.
- I can re-order sentences to create an impact on the reader.
- I can use expanded noun phrases to add well thought out detail to writing.
- I can use punctuation to clarify the meaning of sentences e.g. commas to mark phrases and clauses.
- I can use dialogue effectively and punctuate it accurately.

A Year 5 Speaker at RCSAT

- I can engage the listener by varying my expression and vocabulary.
- I adapt my spoken language depending on the audience, the purpose or the context.
- I can develop my ideas and opinions, providing relevant detail.
- I can express my point of view.
- I show that I understand the main points, including implied meanings in a discussion.
- I listen carefully in discussions. I make contributions and ask questions that are responsive to others' ideas and views.
- I use Standard English in formal situations.
- I am beginning to use hypothetical language to consider more than one possible outcome or solution.
- I can perform my own compositions, using appropriate intonation and volume so that meaning is clear.
- I can perform poems and plays from memory, making careful choices about how I convey ideas. I adapt my expression and tone.
- I am beginning to select the appropriate register according to the context.

Greater Depth in Speaking

- I can organise and shape a talk, making connections between ideas and drawing on different points of view.
- I can use Standard English appropriately.

- I can use persuasive language and techniques to influence the listener.
- I show an understanding of how and why language choices vary in my own and others' talk in different contexts.
- I can sustain listening to different sources, retaining or noting key information.
- I can speak in extended turns to express ideas and opinions, with some relevant detail.
- I can vary vocabulary, grammar, and non-verbal features to suit the audience, purpose, and context.
- I can sustain listening to different sources, retaining or noting key information.
- I can listen to others in discussion and link my own ideas clearly to others' views.

A Year 5 Mathematician at RCSAT

Number, place value, approximation and estimation/rounding

- I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
- I can read, write, order and compare numbers to at least 1,000,000.
- I can determine the value of each digit in numbers up to 1,000,000.
- I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.
- I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000.
- I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
- I can solve number problems and practical problems with the above.

Calculations

- I can add and subtract numbers mentally with increasingly large numbers.
- I can add and subtract whole numbers with more than 4 digits, including using formal written methods.
- I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- I can identify multiples and factors, including finding all factor pairs or a number and common factor pairs of two numbers.
- I use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.

- I can establish whether a number up to 100 is prime and recall prime numbers up to 19.
- I recognise and use square numbers and cube numbers, and the notation for squared and cubed.
- I can multiply and divide numbers mentally drawing on known facts.
- I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- I can multiply numbers up to 4 digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.
- I can divide numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.
- I can solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.
- I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
- I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates.

Fractions, decimals and percentages

- I can recognise mixed numbers and improper fractions and convert from one form to the other.
- I can write mathematical statements >1 as a mixed number.
- I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- I can compare and order fractions whose denominators are multiples of the same number.
- I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- I can read and write decimal numbers as fractions.
- I recognise and can use thousandths and relate them to tenths, hundredths and decimal equivalents.
- I can round decimals with 2 decimal places to the nearest whole number and 1 decimal place.
- I can read, write, order and compare numbers with up to 3 decimal places.
- I can solve problems involving numbers up to 3 decimal places.
- I recognise the percent symbol and understand that percent relates to 'number parts per hundred'.
- I can write percentages as a fraction with denominator hundred, and as a decimal.

- I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator or a multiple of 10 or 25.

Measurement

- I can solve problems involving converting between units of time.
- I can convert between different units of metric measure.
- I understand and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints.
- I can measure and calculate the perimeter of composite rectilinear shapes in cm and m.
- I can calculate and compare the area of rectangles (incl. squares), and including using standard units (cm^2 and cm^3) to estimate the area of irregular shapes.
- I can estimate volume and capacity.
- I can use all four operations to solve problems involving money using decimal notation, including scaling.

Geometry – properties of shapes

- I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
- I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- I can identify 3D shapes, including cubes and other cuboids, from 2D representations.
- I know angles are measured in degrees.
- I can estimate and compare acute, obtuse and reflex angles.
- I can identify angles at a point and one whole turn.
- I can identify angles at a point on a straight line and $\frac{1}{2}$ a turn.
- I can identify other multiples of 90° .
- I can draw given angles and measure them in degrees.

Geometry – position and direction

- I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Statistics

- I can complete, read and interpret information in tables, including timetables.
- I can solve comparison, sum and difference problems using information presented in a line graph.

Greater Depth in Mathematics

At RCSAT we use a range of strategies to challenge at a higher level across Years 1-6. These include:

- Providing problems of greater complexity
- Giving children the opportunity to independently explore and investigate mathematical structures in a range of contexts
- Developing the children's ability to communicate results and methods clearly
- Providing opportunities to generalise mathematical structures and procedures
- Using higher order skills such as; creating, modifying, convincing, justifying, comparing and evaluating.

A Year 5 Scientist at RCSAT

Working scientifically

- I can plan different types of scientific enquiry.
- I can control variables in an enquiry.
- I can measure accurately and precisely using a range of equipment.
- I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

- I can use the outcome of test results to make predictions and set up a further comparative fair test.
- I can report findings from enquiries in a range of ways.
- I can explain a conclusion from an enquiry.
- I can explain causal relationships in an enquiry.
- I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.
- I can read, spell and pronounce scientific vocabulary accurately.

Biology

Living things and their habitats

- I can describe the life cycle of different living things, e.g. mammal, amphibian, insect bird.
- I can describe the differences between different life cycles.
- I can describe the process of reproduction in plants.
- I can describe the process of reproduction in animals.

Animals, including humans

- I can create a timeline to indicate stages of growth in humans.

Chemistry

Properties and changes of materials

- I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets).
- I can describe how a material dissolves to form a solution; explaining the process of dissolving.
- I can describe and show how to recover a substance from a solution.
- I can describe how some materials can be separated.
- I can demonstrate how materials can be separated (e.g. through filtering, sieving and evaporating).
- I know and can demonstrate that some changes are reversible and some are not.
- I can explain how some changes result in the formation of a new material and that this is usually irreversible.
- I can discuss reversible and irreversible changes.
- I can give evidenced reasons why materials should be used for specific purposes.

Physics

Earth and space

- I can describe and explain the movement of the Earth and other planets relative to the Sun.
- I can describe and explain the movement of the Moon relative to the Earth.
- I can explain and demonstrate how night and day are created.
- I can describe the Sun, Earth and Moon (using the term spherical).

Forces

- I can explain what gravity is and its impact on our lives.
- I can identify and explain the effect of air resistance.
- I can identify and explain the effect of water resistance.
- I can identify and explain the effect of friction.
- I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.

Greater Depth in Science

- I can explore different ways to test an idea, choose the best way and give reasons.
- I can vary one factor whilst keeping the others the same in an experiment.
- I can use information to help make a prediction.
- I can explain (in simple terms) a scientific idea and what evidence supports it.
- I can create a timeline to indicate the stages of growth in certain animals, such as frogs and butterflies.
- I can observe my local environment and draw conclusions about life-cycles, for example, the vegetable garden or plants in a shrubbery.
- I can describe methods for separating mixtures, for example, filtration, distillation.
- I can compare the time of day at different places on Earth.
- I can describe and explain how motion is affected by forces, for example, gravitational attractions, magnetic attraction and friction.
- I can work out how water can cause resistance to floating objects.

A Year 5 Historian at RCSAT

- I can draw a timeline with different historical periods showing key historical events or lives of significant people, including Ancient Greece
- I can summarise how Britain may have learnt from other countries and civilizations (historically and more recently).

- I can compare two or more historical periods; explaining things which changed and things which stayed the same.
- I can explain how Parliament affects decision making in England.
- I can test out a hypothesis in order to answer questions.
- I can use research skills to find answers to specific historical questions about Ancient Greece.

A Year 5 Geographer at RCSAT

- I can plan a journey to a place in another part of the world, taking account of distance and time.
- I can name and locate many of the world's most famous mountainous regions in an atlas.
- I can explain how a location fits into its wider geographical location with reference to human and economical features.
- I can locate the Tropic of Cancer and Tropic of Capricorn.
- I can explain why deforestation occurs.
- I understand what is meant by the term 'Fairtrade'.
- I can explain how a locality is affected by tourism.

A Year 5 Artist at RCSAT

- I can identify and draw objects and use marks and lines to produce texture.
- I can successfully use shading to create mood and feeling.
- I can organise line, tone, shape and colour to represent figures and forms in movement.
- I can express emotion in my art.
- I can create an accurate print design following criteria.
- I can use images which I have created, scanned and found; altering them where necessary to create art.
- I can research the work of an artist and use their work to replicate a style.

A Year 5 Designer at RCSAT

- I can come up with a range of ideas after collecting information from different sources.
- I can produce a detailed, step-by-step plan.
- I can suggest alternative plans; outlining the positive features and draw backs.
- I can explain how a product will appeal to a specific audience.

- I can evaluate appearance and function against original criteria.
- I can use a range of tools and equipment competently.
- I can make a prototype before make a final version.
- I show that I can be both hygienic and safe in the kitchen.

A Year 5 Computer User at RCSAT

- I can combine sequences of instructions and procedures to turn devices on and off.
- I can use technology to control an external device.
- I can design algorithms that use repetition & 2-way selection.
- I can analyse information.
- I can evaluate information.
- I understand how search results are selected and ranked.
- I can edit a film.
- I understand that you have to make choices when using technology and that not everything is true and/or safe.

A Year 5 Safe Computer User at RCSAT

Knowledge and understanding

- I can discuss the positive and negative impact of the use of ICT in my own life, my friends and family.
- I understand the potential risk of providing personal information online.
- I recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content.
- I understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented.

- I recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing).
- I understand that some material on the internet is copyrighted and may not be copied or downloaded.
- I understand that some messages may be malicious and know how to deal with this.
- I understand that online environments have security settings, which can be altered, to protect the user.
- I understand the benefits of developing a 'nickname' for online use.
- I understand that some malicious adults may use various techniques to make contact and elicit personal information.
- I know that it is unsafe to arrange to meet unknown people online.
- I know how to report any suspicions.
- I understand I should not publish other people's pictures or tag them on the internet without permission.
- I know that content put online is extremely difficult to remove.
- I know what to do if I discover something malicious or inappropriate.

Skills

- I follow the school's safer internet rules (see e-safety policy)
- I can make safe choices about the use of technology.
- I can use technology in ways which minimises risk. e.g., responsible use of online discussions, etc.
- I can create strong passwords and manage them so that they remain strong.
- I can independently, and with regard for e-safety, select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school.
- I can competently use the internet as a search tool.
- I can reference information sources.
- I can use appropriate strategies for finding, critically evaluating, validating and verifying information. e.g., using different keywords, skim reading to check relevance of information, cross checking with different websites or other non-ICT resources.
- I can use knowledge of the meaning of different domain names and common website extensions (e.g. .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information.

A Year 5 Musician at RCSAT

- I can breathe in the correct place when singing.
- I can maintain my part whilst others are performing their part.
- I can improvise within a group using melodic and rhythmic phrases.

- I can change sounds or organise them differently to change the effect.
- I can compose music which meets specific criteria.
- I can choose the most appropriate tempo for a piece of music.
- I can describe, compare and evaluate music using musical vocabulary.
- I can explain why I think music is successful or unsuccessful.
- I can suggest improvement to my own work and that of others.

A Year 5 International Speaker at RCSAT

Spoken language

- I can hold a simple conversation with at least 4 exchanges.
- I can use my knowledge of grammar to speak correctly.

Reading

- I can use the context to work out unfamiliar words.

Writing

- I can write 2-3 simple sentences.
- I can substitute words and phrases

A Year 5 Sports Person at RCSAT

Games

- I can gain possession by working a team.
- I can pass in different ways.
- I can use forehand and backhand with a racket.
- I can field.
- I can choose a tactic for defending and attacking.
- I can use a number of techniques to pass, dribble and shoot.

Gymnastics

- I can make complex extended sequences.
- I can combine action, balance and shape.
- I can perform consistently to different audiences.

Dance

- I can compose my own dances in a creative way.
- I can perform to an accompaniment.
- My dance shows clarity, fluency, accuracy and consistency.

Athletics

- I can control when taking off and landing.
- I can throw with accuracy.
- I can combine running and jumping.

Outdoor and adventurous

- I can follow a map in an unknown location.
 - I can use clues and a compass to navigate a route.
 - I can change my route to overcome a problem.
I can use new information to change my route.
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