



Computing

Computing		
Algorithms and Programs	Data Retrieving and Organising	Communicating
<ul style="list-style-type: none"> Combine sequences of instructions and procedures to turn devices on or off Understand input and output Use and ICT program to control an external device that is electrical and/or mechanical Use ICT to measure sound or light or temperate using sensors Explore 'What is' questions by playing adventure or quest games Write programs that have sequences and repetitions 	<ul style="list-style-type: none"> Listen to streaming audio such as online radio Download and listen to podcasts Produce and upload a podcast Manipulate sounds using Audacity Select music from open sources and incorporate it into multimedia presentations Work on simple film editing 	<ul style="list-style-type: none"> Use instant messaging to communicate with class members Conduct a video chat with someone elsewhere in the school or in another school Use the word count tool to check the length of a document Use bullets and numbering tools
Using the Internet	Databases	Presentation
<ul style="list-style-type: none"> Use a search engine using keyword searches Compare the results of different searches Decide which sections are appropriate to copy and paste from at least two web pages Save stored information following simple lines of enquiry Download a document and save it to the computer 	<ul style="list-style-type: none"> Create a formula in a spreadsheet and then check for accuracy and plausibility Search databases for information using symbols such as => or< Create databases planning the fields, rows and columns Create graphs and tables to be copied and pasted into other documents 	<ul style="list-style-type: none"> Use a range of presentation applications Consider audience when editing a simple film Know how to prepare and then present a simple film Use ICT to record sounds and capture both still and video images Make a home page for a website that contains links to other pages Capture sounds, images and video
Exceeding expectations		
<ul style="list-style-type: none"> Make a multimedia presentation that contains: sound; animation; video and buttons to navigate Save an image document as a gif or I peg.file format using the 'save as' command Make an information poster using graphics skills to good effect 		



Rhodes Avenue Curriculum Objectives – Year 5

Art			
Drawing	Painting	Printing	Sketch books
<ul style="list-style-type: none"> Identify and draw simple objects, and use marks and lines to produce texture Successfully use shading to create mood and feeling Organise line, tone, shape and colour to represent figures and forms in movement Show reflections Explain why they have chosen specific materials to draw with 	<ul style="list-style-type: none"> Create all the colours they need Create mood in their paintings Express their emotions accurately through their painting and sketches 	<ul style="list-style-type: none"> Print using a number of colours Create an accurate print design that meets a given criteria Print onto different materials 	<ul style="list-style-type: none"> Keep notes in their sketch books as to how they might develop their work further Use their sketch books to compare and discuss ideas with others?
3D	Collage	Use of IT	Knowledge
<ul style="list-style-type: none"> Experiment with and combine materials and processes to design and make 3D form Sculpt clay and other mouldable materials Use textile and sewing skills as part of a project, e.g. hanging, textile book, etc. This could include running stitch, cross stitch, backstitch, appliqué and/or embroidery. 	<ul style="list-style-type: none"> Use a ceramic mosaic to produce a piece of art Combine visual and tactile qualities 	<ul style="list-style-type: none"> Create a piece of art work which includes the integration of digital images and have taken Combine graphics and text based on their research Scan images and take digital photos, and use software to alter them, adapt them and create work with meaning. Create digital images with animation, video and sound to communicate their ideas. 	<ul style="list-style-type: none"> Experiment with different styles which artists have used Learn about the work of others by looking at their work in books, the internet, visits to galleries and other sources of information



Foreign Languages			
Listening and responding	Speaking	Reading and responding	Writing
<ul style="list-style-type: none">• Understand longer passages made up of familiar language in simple sentences• Identify main points and some detail	<ul style="list-style-type: none">• Hold a simple conversation with at least 3 – 4 exchanges• Use knowledge of grammar to adapt and substitute single words and phrases	<ul style="list-style-type: none">• Understand a short story or factual text and note some of the main points• Use context to work out unfamiliar words	<ul style="list-style-type: none">• Write a paragraph of about 3 – 4 simple sentences• Adapt and substitute individual words and set phrases• Use a dictionary or glossary to check words learnt



Geography			
Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
<ul style="list-style-type: none"> • Collect information about a place and use it in a report • Map land use • Find possible answers to their own geographical questions • Make detailed sketches and plans; improving their accuracy later • Plan a journey to a place in another part of the world, taking account of distance and time 	<ul style="list-style-type: none"> • Explain why many cities of the world are situated by rivers • Explain how a location fits into its wider geographical location; with reference to physical features • Explain how the water cycle works • Explain why water is such a valuable commodity 	<ul style="list-style-type: none"> • Explain why people are attracted to live by rivers • Explain how a location fits into its wider geographical location; with reference to human and economical features • Explain what a place might be like in the future, taking account of issues impacting on human features 	<ul style="list-style-type: none"> • Name and locate many of the world’s major rivers on maps • Name and locate many of the world’s most famous mountain regions on maps • Locate the USA and Canada on a world map and atlas • Locate and name the main countries in South America on a world map and atlas
Exceeding expectations			
<ul style="list-style-type: none"> • Work out an accurate itinerary detailing a journey to another part of the world 	<ul style="list-style-type: none"> • Explain what a place (open to environmental and physical change) might be like in the future taking account of physical features 	<ul style="list-style-type: none"> • Report on ways in which humans have both improved and damaged the environment 	<ul style="list-style-type: none"> • Begin to recognise the climate of a given country according to its location on the map



History		
Chronological understanding	Knowledge and interpretation	Historical enquiry
<ul style="list-style-type: none"> • Use dates and historical language in their work • Draw a timeline with different information, such as, periods of history, when famous people lived, etc. • Use their mathematical skills to work exact time scales and differences as need be 	<ul style="list-style-type: none"> • Describe historical events from the different period/s they are studying/have studied • Make comparisons between historical periods; explaining things that have changed and things which have stayed the same • Explain the role that Britain has had in spreading Christian values across the world • Begin to appreciate that how we make decisions has been through a Parliament for some time • Appreciate that appreciate that significant events in history has helped shape the country we have today • Have a good understanding as to how crime and punishment has changes over the years 	<ul style="list-style-type: none"> • Test out a hypothesis in order to answer a question • Appreciate how historical artefacts has helped us understand more about British lives in the present and past
Exceeding expectations		
<ul style="list-style-type: none"> • Create timelines which outline the development of specific features, such as medicine; weaponry; transport, etc. 	<ul style="list-style-type: none"> • Appreciate how plagues and other major events have created huge differences to the way medicines and health care was looked at 	<ul style="list-style-type: none"> • Research the life of one person who has had an influence on the way Great Britain is divided into four separate countries



Music		
Performing	Composing (incl notation)	Appraising
<ul style="list-style-type: none"> • Breathe in the correct place when singing • Sing and use their understanding of meaning to add expression • Maintain their part whilst others are performing their part • Perform 'by ear' and from simple notations • Improvise within a group using melodic and rhythmic phrases • Recognise and use basic structural forms e.g. rounds, variations, rondo form 	<ul style="list-style-type: none"> • Change sounds or organise them differently to change the effect • Compose music which meets specific criteria • Use their notations to record groups of pitches (chords) • Use a music diary to record aspects of the composition process • Choose the most appropriate tempo for a piece of music 	<ul style="list-style-type: none"> • Describe, compare and evaluate music using musical vocabulary • Explain why they think their music is successful or unsuccessful • Suggest improvements to their own or others' work • Choose the most appropriate tempo for a piece of music • Contrast the work of famous composers and show preferences
Exceeding expectations		
<ul style="list-style-type: none"> • Use pitches simultaneously to produce harmony by building up simple chords • Devise and play a repeated sequence of pitches on a tuned instrument to accompany a song 	<ul style="list-style-type: none"> • Understand the relation between pulse and syncopated patterns • Identify (and use) how patterns of repetition, contrasts and variations can be organised to give structure to a melody, rhythm, dynamic and timbre 	<ul style="list-style-type: none"> • Explain how temp changes the character of music • Identify where a gradual change in dynamics has helped to shape a phrase of music



Dance

- Plan and perform dances confidently
- Compose motifs and plan dances creatively and collaboratively in groups
- Adapt and refine the way they use weight, space and rhythm in their dances to express themselves in the style of dance they use
- Perform different styles of dance clearly and fluently
- Organise their own warm-up and cool-down exercises
- Show an understanding of safe exercising
- Recognise and comment on dances, showing an understanding of style
- Suggest ways to improve their own and other people's work

Exceeding expectations

- Use their understanding of composition to create dance phrases for themselves and others in their group
- Use their knowledge of dance to adapt their skills to meet the demands of a range of dance styles
- Show expression in their dances and sensitivity to music
- Organise their own warm-up and cool-down exercises
- Show that they understand why warming-up is important for a good performance
- Identify the form and structure of a dance
- Make imaginative suggestions on how to improve their own and other people's work



Physical Education			
<p>Acquiring and developing skills</p> <ul style="list-style-type: none"> • Link skills, techniques and ideas and apply them accurately and appropriately • Show good control in their movements 	<p>Evaluating and improving</p> <ul style="list-style-type: none"> • Compare and comment on skills, techniques and ideas that they and others have used • Use their observations to improve their work 	<p>Health and fitness</p> <ul style="list-style-type: none"> • Explain some important safety principles when preparing for exercise • Explain what effect exercise has on their body • Explain why exercise is important 	<p>Dance (also covered in Dance section)</p> <ul style="list-style-type: none"> • Compose their own dances in a creative and imaginative way • Perform to an accompaniment, expressively and sensitively • Are their movements controlled • Does, their dance show clarity, fluency, accuracy and consistency
<p>Games</p> <ul style="list-style-type: none"> • Gain possession by working as a team • Pass in different ways • Use forehand and backhand with a racquet • Field • Choose the best tactics for attacking and defending • Use a number of techniques to pass, dribble and shoot 	<p>Gymnastics</p> <ul style="list-style-type: none"> • Make complex or extended sequences • Combine action, balance and shape • Perform consistently to different audiences • Are their movements accurate, clear and consistent 	<p>Athletics</p> <ul style="list-style-type: none"> • Controlled when taking off and landing in a jump • Throw with accuracy • Combine running and jumping • Follow specific rules 	<p>Outdoors/adventurous Competition</p> <ul style="list-style-type: none"> • Follow a map an unknown location • Use clues and compass directions to navigate a route • Change their route if there is a problem • Change their plan if they get new information



Working Scientifically		
Planning	Obtaining and presenting evidence	Considering evidence and evaluating
<ul style="list-style-type: none">• Plan and carry out an investigation by controlling variables fairly and accurately• Make a prediction with reasons• Use test results to make further predictions and set up further comparative tests• Present a report of their findings through writing, display and presentation	<ul style="list-style-type: none">• Take measurements using a range of scientific equipment with increasing accuracy and precision• Record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models	<ul style="list-style-type: none">• Report findings from investigations through written explanations and conclusions• Use a graph to answer scientific questions
Exceeding expectations		
<ul style="list-style-type: none">• Explore different ways to test an idea and choose the best way, and give reasons• Vary one factor whilst keeping the others the same in an experiment• Use information to help make a prediction• Explain (in simple terms) a scientific idea and what evidence supports it	<ul style="list-style-type: none">• Decide which units of measurement they need to use• Explain why a measurement needs to be repeated	<ul style="list-style-type: none">• Find a pattern from their data and explain what it shows• Link what they have found out to other science• Suggest how to improve their work and say why they think this



Life Processes and Living Things	
Animals, including humans	All living Things
<ul style="list-style-type: none">• Create a timeline to indicate stages of growth in humans• Explain what puberty is	<ul style="list-style-type: none">• Describe and compare the life cycles of a range of animals, including humans, amphibians, insects and birds• Describe the life cycles of common plants• Describe and explain the process of respiration in humans and plants• Talk with knowledge about birth, reproduction and death of familiar animals or plants• Explore the work of well know naturalists (David Attenborough and Jane Goodall)
Exceeding expectations	
<ul style="list-style-type: none">• Create a timeline to indicate stages of growth in certain animals, such as frogs and butterflies	<ul style="list-style-type: none">• Observe their local environment and draw conclusions about life-cycles (for example, the vegetable garden or plants in a shrubbery)• Compare the life cycles of plants and animals in their local environment with the life cycles of those around the world, e.g. rainforests



Materials and their Properties

Properties and changes to materials

- Test and group materials based on scientific evidence (hardness, solubility, transparency, conductivity, insulation, magnetism)
- Explain the process of dissolving
- Recover a substance from a solution
- Decide how a mixture would best be separated (filtering, sieving, evaporating)
- Give reasons for the uses of everyday materials based on scientific evidence
- Show what they know about the properties of different materials
- Use their knowledge of materials to suggest ways to classify (solids, liquids, gasses)
- Describe changes using scientific words (evaporation, condensation)
- Use terms 'reversible' and 'irreversible'

Exceeding expectations

- Describe methods for separating mixtures (filtration, distillation)
- Work out which materials are most effective for keeping us warm or for keeping something cold



Physical Processes		
Earth and Space	Magnetism	Forces
<ul style="list-style-type: none"> • Identify and explain the movement of the Earth relative to the sun • Explain how seasons and the associated weather is created • Identify and explain the movement of the Moon relative to the Earth • Explain the size, shape and position of the earth, sun and moon • Explain how night and day are created and use diagrams to show this • Explain how planets are linked to stars 	<ul style="list-style-type: none"> • Explain how the force of magnetism works • Describe how magnetism is used in everyday objects • Describe magnets as having two poles • Make predictions associated with whether two magnets will attract or repel depending on which poles are facing 	<ul style="list-style-type: none"> • Explain what gravity is and its impact on our lives • Explain why a wheeled object that is initially pushed will slow down and stop • Explain the impact of friction on a moving object • Explain the effect of drag force on moving objects • Explain how force and motion can be transferred through gears, pulleys, levers and springs
Exceeding expectations		
<ul style="list-style-type: none"> • Compare the time of day at different places on the earth • Create shadow clocks • Begin to understand how older civilizations used the sun to create astronomical clocks • Explore the work of some space pioneers (Galileo, Copernicus, Neil Armstrong) 	<ul style="list-style-type: none"> • Work out how magnets are useful in an everyday context • Work out the link between magnets and the North and South poles 	<ul style="list-style-type: none"> • Describe and explain how motion is affected by forces (including gravitational attractions, magnetic attraction and friction) • Design very effective parachutes • Work out how water can cause resistance to floating objects



Design and Technology		
Design	Create	Evaluate
<ul style="list-style-type: none"> • Come up with a range of ideas after collecting information • Take users' views into account when designing • Produce a detailed step by step plan • Suggest alternative plans and the advantages/drawbacks of each 	<ul style="list-style-type: none"> • Explain why their finished product is going to be of a good quality • Explain how product will appeal to audience • Use a range of tools and equipment expertly 	<ul style="list-style-type: none"> • Continue to check design is the best it can be • Check whether anything could be improved • Evaluate appearance and function against original criteria

Cooking and nutrition	Textiles	Electrical and mechanical	Stiff and flexible sheet materials	Mouldable materials
<ul style="list-style-type: none"> • Describe what needs to be done to be both hygienic and safe • Present product well 	<ul style="list-style-type: none"> • Consider the user when choosing the textile • Make product attractive and strong • Make up a prototype first • Use a range of joining techniques 	<ul style="list-style-type: none"> • Incorporate a switch into product • Refine product after testing it • Incorporate hydraulics and pneumatics 	<ul style="list-style-type: none"> • Make accurate measurements to ensure everything is precise • Ensure product is strong and fit for purpose 	<ul style="list-style-type: none"> • Be motivated to refine and improve product • Persevere through different stages of the making process



Religious Education					
Beliefs, Teachings and Sources	Practices and ways of life	Forms of Expressing Meaning	Identity, Diversity and Belonging	Meaning, Purpose and Truth	Values and Commitments
<ul style="list-style-type: none"> Discuss the links between beliefs regarding important female figures in religious groups 	<ul style="list-style-type: none"> Describe some of the things that are the same & different for religious people Use religious language accurately to describe & compare what practices & experiences may be involved in belonging to different religious groups 	<ul style="list-style-type: none"> Describe how religious beliefs, ideas & feelings are expressed in a range of styles & suggest what they mean 	<ul style="list-style-type: none"> Ask questions about who we are & where we belong, & suggest answers which refer to people who have inspired & influenced them & others 	<ul style="list-style-type: none"> Ask questions about the meaning & purpose of life, & suggest a range of answers which might be personal or given by members of different religious groups or individuals 	<ul style="list-style-type: none"> Ask questions about the moral decisions people make & suggest what might happen as a result of different decisions
Exceeding expectations					
<ul style="list-style-type: none"> Suggest reasons for the variety of beliefs which people hold, & explain how religious sources are used to provide answers to important questions 	<ul style="list-style-type: none"> Describe why some people belong to religions & explain how similarities & differences within & between religions can make a difference to the lives of individuals & communities 	<ul style="list-style-type: none"> Use a wide religious vocabulary in suggesting reasons for the similarities & differences in the ways people express their faith 	<ul style="list-style-type: none"> Give own & others' views on questions about who we are & where we belong & on the challenges of belonging to a religion & explain what inspires & influences them 	<ul style="list-style-type: none"> Ask questions about the meaning & purpose of life & suggest answers which relate to the search for truth & their own/others' lives 	<ul style="list-style-type: none"> Ask questions about things that are important to them & to other people & suggest answers which relate to their & others' lives



Rhodes Avenue Curriculum Objectives – Year 5