



St. Gerard's Curriculum Overview Year 4

Computing

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content, that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Geography

Locational knowledge

locate the world's countries, using maps to focus on North America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities (CARIBBEAN inc a DT link)

identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere

Human and physical geography

describe and understand key aspects of:

- physical geography, including: climate zones (WEATHER)

- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water (ENVIRONMENTAL ISSUES – cc link with SCIENCE)

Place Knowledge

understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region within North America (SNOWDON V CARIBBEAN).

Geographical skills and fieldwork

Design Technology

Design (MONEY CONTAINERS (PSHE) & ALARMS (SCIENCE))

use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately

select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

investigate and analyse a range of existing products

evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

apply their understanding of how to strengthen, stiffen and reinforce more complex structure

understand and use electrical systems in their products

apply their understanding of computing to program, monitor and control their products

Cooking & Nutrition

CARIBBEAN SOUP & ICE-CREAM

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Science including working scientifically

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- recognise that environments can change and that this can sometimes pose dangers to living things.
- describe the simple functions of the basic parts of the digestive system in humans
- identify the different types of teeth in humans and their simple functions
- construct and interpret a variety of food chains, identifying producers, predators and prey.
- compare and group materials together, according to whether they are solids, liquids or gases
- observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
- identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature
- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases.
- identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- recognise some common conductors and insulators, and associate metals with being good conductors.

PSHE

- Grow in resilience by reflecting on achievements + mistakes, making responsible choices and creating personal goals.
- Identify rules and know why they are needed in different situations (school / nationally)
- Know how to stay healthy and safe, including exercise, diet, drugs, acceptable physical contact, road use and understanding what affects mental health.
- Realise the nature and consequences of racism, teasing and bullying

Art

MONET & JOURNEYS

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] about great artists, architects and designers in history.

History

- the Roman Empire and its impact on Britain
- Britain's settlement by Anglo-Saxons and Scots the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor (TAMWORTH CASTLE or BMAG)

Music

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related dimensions of music (recorders)
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians (Dan Callow)
- develop an understanding of the history of music

Physical Education

- use running, jumping, throwing and catching in isolation and in combination
- play competitive games, modified where appropriate and apply basic principles suitable for attacking and defending
- develop flexibility, strength, technique, control and balance
- perform dances using a range of movement patterns
- take part in outdoor and adventurous activity challenges both individually and within a team
- compare their performances with previous ones and demonstrate improvement to achieve their personal best.

Swimming, gymnastics, netball, hockey, dance, OAA & athletics

Modern Foreign Languages

- Understand information when listening to a short passage
- Ask questions during a conversation
- Describe three things about myself
- Read and understand a text
- Write sentences using a model
- Write sentences about food (likes and dislikes)

Religious Education

Advent, Christmas, Lent, Holy week and Easter are taught to every class each year.

- Creation & the story from Abraham to Joseph
- Jesus teaches us how to pray
- Jesus, light of the world
- Old Testament: Moses – King David
- Pentecost
- Sharing in the life of Christ
- Special roles and responsibilities