<u>Geography</u>

- Can I <u>compare</u> the world's climate zones?
- Can I<u>examine</u> the world's biomes and how they are composed?
- Can I <u>compare</u> geographical features of a region within South America with the UK?
- Can I <u>identify</u> and <u>locate</u> human and physical features within Brazil?
- Can I <u>understand</u> what deforestation is?

Computing

- Can I <u>understand</u> the need for private information to be encrypted?
- Can I encrypt and decrypt messages in simple ciphers?
- Can I appreciate the need to use complex passwords and to keep them secure?
- Can I <u>develop</u> an understanding of how encryption works on the web?

Science

- Can I<u>investigate</u> and <u>compare</u> the sexual and asexual reproduction of plants?
- Can I <u>compare</u> the lifecycle of plants from around the world?
- Can I <u>produce</u> my findings on how different animals reproduce and grow?
- Can I <u>examine</u> and <u>compare</u> the lifecycles of animals from around the world?

<u>Skills</u>

- Can I <u>plan</u> a holiday to Brazil?
- Can I compare data about deforestation?
- Can I <u>produce</u> a persuasive argument about deforestation?
- Can I produce a comparative report about lifecycles?



Extended learning/wider opportunities

- Research what is happening to the rainforest
- Research what the rainforest if composed of

What's so special about Brazil?

- Can I <u>reflect</u> on the effects of human activity on the rainforest?
- Can I convince you to save the rainforest?
 - Can I <u>create</u> a model biome?
- Can I <u>collaborate</u> to create a samba dance?
 - Can I <u>compare</u> and <u>contrast</u> the UK and Brazil?

The Arts

- Can I <u>appraise</u> the artwork by Oenone Hammersley?
- Can I <u>produce</u> a Rainforest painting inspired by Oenone Hammersley?
- Can I <u>evaluate</u> my composition?

<u>SMSC</u>

- Can I <u>discuss</u> what it means to belong to a faith?
- Can I **identify** what it means to be a Muslim today?
- Can I compare the lives of people from different religions?
- Can I <u>compare</u> the life of a Brazilian to my own?
- Can I reflect on the gap between the rich and poor in Brazil?
- Can I <u>research</u> the importance of Christ the Redeemer?

Children's experience

Hook

workshop

and local context

Building model rainforests

Samba and drumming

Year 5 Spring 2 - coverage

<u>Science</u>

Living things and their habitats

Pupils should be taught to:

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- describe the life process of reproduction in some plants and animals

Computing

We are cryptographers

This unit will enable the children to:

- be familiar with semaphore and Morse code
- understand the need for private information to be encrypted
- encrypt and decrypt messages in simple ciphers
- appreciate the need to use complex passwords and to keep them secure
- have some understanding of how encryption works on the web.

Art and design

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

Pupils should be taught:

- 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

<u>D&T</u>

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- 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, crosssectional 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 structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Geography

Locational knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and **South America**, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Place knowledge

• understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

Human and physical geography

describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- 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

Geographical skills and fieldwork

• use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

<u>Music</u>

Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.

Pupils should be taught to:

• 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
- 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
- develop an understanding of the history of music.