

## Geography

### Local Study of Cragside and the River Coquet

#### National Curriculum Links:

Pupils should be taught to:

- name and locate counties and cities of the UK and their identifying physical characteristics including rivers.
- describe and understand key aspects of physical geography including: rivers and the water cycle.
- use maps and atlases to locate and describe features studied.
- use the eight points of a compass, four and six figure grid references, symbols and keys including the use of Ordnance Survey maps.
- use field work to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans, graphs and digital technologies.

#### Learning Outcomes:

Children will be able to:

- explain the features of the water cycle and why it is a closed cycle
- use atlases to locate rivers both in the UK and around the world
- identify the features of a river's course
- compare the features of a river at different points along its course
- describe how rivers can change over time
- use four and six figure grid references to give accurate locations on a map
- interpret OS maps, including using a key
- state the advantages and disadvantages of different uses of a river
- create sketch maps of a local river

**Educational Visit Link:** Cragside / Rothbury visit

## Outdoor Learning Opportunities

### Science - Light

- Investigate how the human eye interprets lights and produce a model using natural materials.

### Geography - River Coquet

- Recreating and labelling the River Coquet using natural materials.

### PE - NUF Problem Solving Challenges

## Foreign Languages

### French: The High Street

#### National Curriculum Links:

Pupils should be taught to:

- listen attentively to spoken language and show understanding by joining in and responding
- engage in conversations, ask and answer questions.
- speak in sentences using familiar vocabulary
- read carefully and show understanding of words, phrases and simple writing.

#### Learning Outcomes:

Children will be able to:

- make simple sentences and manipulate them
- understand and use negatives
- recite a short text with accurate pronunciation
- appreciate similarities and differences between French and English high streets

## Raging Rivers



## Religious Education

### Islam: What is the best way for a Muslim to show commitment to God? (P4C)

#### Learning Outcomes:

Children will be able to:

- show an understanding of why people show commitment in different ways.
- describe how different practices enable Muslims to show their commitment to God and understand that some of these will be more significant to some Muslims than others.
- think of some ways of showing commitment to God that would be better than others for Muslims.

## Design Technology



### Structures: Building Bridges

#### National Curriculum Links:

Pupils should be taught about:

- 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
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures

#### Learning Outcomes:

Children will be able to:

- explore ways in which pillars / beams are used to span gaps.
- explore ways in which trusses can be used to strengthen bridges.
- explore ways in which arches are used to strengthen bridges.
- explain how suspension bridges are able to span long distance
- develop criteria and design a prototype bridge for a purpose.
- analyse and evaluate products according to design criteria

**Educational Visit Link:** Cragside

## Physical Education



### Team Games and Swimming

#### National Curriculum Links:

Pupils should be taught to:

- 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 & balance
- Swim competently, confidently and proficiently over a distance of at least 25 metres
- Use a range of strokes effectively

#### Problem Solving (NUF)

- Take part in outdoor and adventurous activity challenges both individually and within a team

## Science

### Light

#### National Curriculum Links:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Recognise that light appears to travel in straight lines
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

#### Learning outcomes:

Children will:

- review understanding of light and shadow and to explore how light travels.
- investigate how we see things through light entering the eyes.
- explore how light can be reflected and change direction.
- investigate reflections from a variety of surfaces.
- plan and carry out an experiment to investigate how shadows behave.
- explore the differences between shadows and reflections and consolidate knowledge of how we see things.

## Music

- **Charanga: Livin' on a Prayer (Yr6) / Happy (Yr5)**

#### National Curriculum Links:

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
- Listen with attention to detail and recall sounds
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians



## Maths

#### National Curriculum Links:

Year 5 - Number and Place Value, Addition, Subtraction and Statistics (White Rose)

Pupils should be taught to:

- **4NPV-1** Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100 (RtP)
- **4NPV-2** Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning (RtP)
- **4NPV-3** Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each. (RtP)
- **3NPV-1** Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.
- **3NPV-2** Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning.
- **3NPV-3** Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.
- Read, write order and compare numbers up to at least 1,000,000 and determine the value of each digit.
- Count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000.
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
- Round any number to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.
- Solve number problems and practical problems that involve all of the above.
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
- Add and subtract whole numbers with more than 4 digits, including using formal written methods.
- Add and subtract numbers mentally with increasingly large numbers.
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
- Solve comparison, sum and difference problems using information presented in a line graph.
- Complete, read and interpret information in tables including timetables.

## Maths

#### National Curriculum Links:

Year 6 - Number and Place Value, Addition, Subtraction, Multiplication and Division (White Rose)

Pupils should be taught to:

- **5NF-1** Secure fluency in multiplication table facts, and corresponding division facts, through continued practice (RtP)
- **5MD-2** Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors (RtP)
- **5MD-3** Multiply any whole number with up to 4 digits by any one-digit number using a formal written method
- **5MD-4** Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context.
- Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
- Round any whole number to a required degree of accuracy.
- Use negative numbers in context, and calculate intervals across zero.
- Solve addition and subtraction multi-step problems in contexts, deciding which operations to use and why.
- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
- Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as appropriate for the context.
- Perform mental calculations, including with mixed operations and large numbers.
- Identify common factors, common multiples and prime numbers.
- Use knowledge of the order of operations to carry out calculations involving the four operations.
- Solve number and practical problems that involve all of the above.



## English

**Recounts – Kensuke's Kingdom**

**Poetry – A River Speaks (Joshua Seigal) / The River (Valerie Bloom)**

National Curriculum Links:

Pupils should be taught to:

- Continuing to read and discuss an increasingly wide range of genres.
- Develop positive attitudes to reading and understanding of what they read by increasing their familiarity with a range of books and text types
- Discuss the words that capture the readers interest
- Explain and discuss their understanding of what they have read
- Retrieve and record information from fiction and non-fiction books
- Identify the audience for and purpose of a piece of writing
- To use figurative language, using other similar writing as models for their own
- Plan, draft, write, evaluate and edit their written work
- Read aloud their own writing, using appropriate intonation and controlling the tone and volume so that the meaning is clear
- Increase the legibility, consistency and quality of their handwriting
- Proof read for spelling and punctuation errors

**English recovery**

**Year 5**

- Understand and use grammatical terminology from Years 3 and 4.
- Know and apply spelling rules from Years 3 and 4

**Year 6**

- Understand and use grammatical terminology from Years 3, 4 and 5.
- Know and apply spelling rules from Years 3, 4 and 5



## Mastery Maths

Geography: Rivers

After looking at rivers in the United Kingdom the children will convert lengths of rivers from miles to km and rank them in ascending and descending order.

Science: Light

Children will investigate angles and distance of shadows and record this information

Design Technology: Bridges

Children will draw their plan for building bridges and detail actual measurements.

## Mastery English

History: Lord Armstrong

Children will produce a written, non-fiction piece about Lord Armstrong and Craggside.

DT: Building Bridges

Children will write an evaluation of their bridges using a given success criteria.

## Computing

**- E-Safety**

National Curriculum Links:

Pupils should be taught to:

- Use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Learning Outcomes:

Children will be able to:

- find similarities and differences between in-person and cyberbullying.
- identify good strategies to deal with cyberbullying.
- identify secure websites by identifying privacy seals of approval.
- understand the benefits and pitfalls of online relationships.
- identify information that should never be shared.
- recognise ways in which the internet and social media can be used both positively and negatively.
- identify what is appropriate to share on social media and what is not.
- know how to use social media responsibly to protect the health, wellbeing and rights of all.



## History

**Local Study of Craggside and Lord Armstrong**

National Curriculum Links:

Pupils should:

- Study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.

Learning Outcomes:

Children will be able to:

- explain the history and significance of Craggside House
- explain the history of Sir William Armstrong and his achievements relating to hydroelectricity
- identify other hydraulic mechanisms inspired by the work of Lord Armstrong.

## PSHE

**Jigsaw: Being Me In My World**

Pupils should be able to:

- Compare their life with other people in their country and explain why we have rules, rights and responsibilities to try and make the school and the wider community a fair place.
- Explain how the actions of one person can affect another and can give examples of this from school and a wider community context.

## Science

### Electricity

#### National Curriculum Links:

Pupils should be taught to:

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram

#### Learning outcomes:

Children will be able to:

- recap knowledge of electricity and circuits
- investigate ways in which the brightness of a bulb or speed of a motor is changed.
- recognise and use conventional symbols for circuits
- plan, carry out and evaluate an experiment to see how changing the wire in a circuit affects the brightness of a bulb.
- review and assess understanding of circuits.