NEWNHAM CROFT PRIMARY SCHOOL

WATER

YEAR 5/6
SUMMER 1
CYCLE 2

This topic is focused around geographical concepts such as coastal erosion, river courses and weathering and builds upon earlier learning about the weather and where rivers are. The children will become secure in their understanding of the scientific principles that underpin the water cycle. This will link to art where the children will create artwork based on a trip to the river. The majority of the learning in Science will cover electricity where circuits will be created, with variables being changed and observations made. The DT will be linked where the knowledge will be applied to making electrical buzzer games.

A study of water's journey from its source to the sea and its uses along the way.

SUBJECT AREAS

SCIENCE

- To recognise the different parts of an electrical circuit and be able to name them
- To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells in a circuit
- To compare and give reasons for variations in how components function
- To use recognised symbols when representing a circuit in a diagram
- To explore the benefits of parallel circuits
- To plan a fair tests selecting the most suitable variables to measure, change and keep the same
- To recognise when variables need to be controlled or cannot be controlled
- To identify when and how to use fair tests
- To make predictions based on previous test results
- To take measurements, using a range of scientific equipment with increasing accuracy and precision
- Identify evidence that supports/ refutes causal relationship
- To record data and results of increasing complexity using scientific diagrams and tables
- Take repeat readings when appropriate
- To report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions
- To identify evidence that has been used to support or refute ideas
- To evaluate original hypothesis against observed evidence and reach appropriate conclusions

GEOGRAPHY

- To name and locate many of the world's major rivers on maps
- To name and locate many of the world's most famous mountain regions on maps
- To locate significant counties on a world map and atlas
- To recognise key symbols used on ordnance survey maps
- To give an extended description of the human features of different places around the world
- To explain why many cities of the world are situated by rivers
- To explain how a location fits into its wider geographical location; with reference to physical features
- To explain how the water cycle works
- To explain why water is such a valuable commodity
- To explain what a place (open to environmental and physical change) might be like in the future taking account of physical features
- To give extended descriptions of the physical features of different places around the world, including mountains, estuaries

ART AND DESIGN

- Explain why they have chosen specific painting techniques
- To use fine brushwork to create detailed images and develop their own style
- Use research and knowledge on different artist styles to experiment in their own work
- Explore the impact of artists work on society
- Create work which is open to interpretation by the audience
- Create own abstract pattern to reflect personal experiences and expression
- To explore and discuss the work of famous artists and their use of pattern

DESIGN TECHNOLOGY

- To produce suitable lists of tools, equipment/materials needed
- To use selected tools and equipment precisely
- Evaluate quality of design while designing and making; is it fit for purpose?
- Evaluate ideas and finished product against specification, stating if it's fit for purpose
- To test and evaluate final product; explain what would improve it and the effect different resources may have had
- To do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose
- Evaluate how much products cost to make and how innovative they are
- Explain how to be safe and follow own guidelines
- To present a product well - interesting, attractive, fit for purpose
- To use a number of components in a circuit
- To think of ways that adding a circuit would improve a product

COMPUTING

- To use software programs to create 2D images
- I can recognise that vector drawings are made using shapes
- I can experiment with the shape and line tools
- I can discuss how vector drawings are different from paper-based drawings
- I can identify the shapes used to make a vector drawing
- I can explain that each element added to a vector drawing is an object
- I can move, resize, and rotate objects I have duplicated
- I can use the zoom tool to help me add detail to my drawings
- I can explain how alignment grids and resize handles can be used to improve consistency
- I can modify objects to create a new image

MUSIC

- Listen to longer pieces of music and identify features
- Comment on how sounds are used to create different moods and textures
- Develop an understanding of the history of music
- Recognise and explore different combinations of pitch sounds
- Identify melodic phrases and play them by ear
- To play pitched instruments with accuracy to achieve a tune
- Use a range of stimuli and develop musical ideas into a completed composition
- Perform an independent part keeping to a steady beat

MODERN FOREIGN LANGUAGES

- I can listen and write short phrases including unfamiliar words more accurately, when focusing on transcription.
- I enjoy listening to and joining in with songs and short poems.
- I read familiar words and short sentences aloud with clear and comprehensible pronunciation.
- I can read aloud single unknown words more readily.
- I understand around 300/400 words when I listen and read them as single items and in short and compound sentences which describe people, places, things and actions.
- I can use the words I know in a sentence to work out likely meanings of single unknown words
- I use a dictionary
- I can use around 300/400 words to engage in short exchanges; ask and answer questions; express opinions and respond to those of others; seek clarification and help.
- I can speak in and write sentences about people, places, things and actions, using familiar vocabulary and basic language structures.
- I distinguish and understand (in listening and writing): Est-ce que questions (with WH-words),
- To describe people, places, things and actions (in speaking and writing) I use singular and plural articles (indefinite and definite), singular and plural forms of ÊTRE, AVOIR, (il y a), regular -ER verbs, singular ALLER, FAIRE (including weather expressions), 2-verb structures with singular AIMER, DETESTER, DEVOIR, VOULOIR, POUVOIR) + infinitive, singular and plural adjectives (-(e)s, -eux/-euses), intonation questions (including with quoi, où, combien, comment, quand, qui), Est-ce que questions (with WH-words)

PHYSICAL EDUCATION

- To strike a ball using good hand-eye coordination
- To field a ball and return it accurately
- To use forehand and backhand with a racket
- To make a team plan and communicate it with others
- To explain complicated rules of games
- To choose appropriate warm ups and cool downs

RELIGIOUS EDUCATION

- To articulate and apply the different responses to ethical questions from a range of different religions
- To investigate the significance of religion in the local, national and global communities
- To describe and understand religious and other responses to ultimate and ethical questions
- To discuss and apply their own and others ideas about ethical questions and to express their own ideas clearly in response
- To reflect on sources of inspiration in their own and others' lives