**

Key Learning Overview;-

 Science: in science the children will be learning about states of matter.

Geography: the children will learn about how rivers are formed, their features and their locations around the world.

History: the children will learn about Ancient Egypt, the river Nile and its people.

DT: children will plan and cook a healthy meal using the Eatwell plate.

Authentic outcome: the children will organise and cook a meal for members of their families.

Writing Opportunities- we will write: a classic narrative poem based on Macavity the Mystery Cat (learnt for a performance), a fairy tale and a newspaper report.

**BRABIN’S ENDOWED PRIMARY SCHOOL**

**Class: Sycamore Year 3/4 Term: Spring 1 Cycle B Curriculum Unit – Human Fuel**

Class Novel, key texts and extracts-

Macavity the Mystery Cat, the Pied Piper of Hamlin and other Fairy tales and appropriate newspaper reports from First News.

**Curriculum Shapers**

**Key Questions**

* What is a river?
* How is a river different from other bodies of water? e.g. streams, canals, reservoirs, lakes etc.
* Where does the water come from?  Where does it go? *(water cycle)*.
* Where are the key rivers in the world, in the UK, and locally?
* What are they like? How long? How wide? How much water?
* How did that river get like that? Why and how is it changing? Is the river still changing?
* How do rivers affect people’s lives and influence human activity?
* How do people affect rivers?



* Be Curious: engage in first-hand experiences and plan and cook meals.
* Be Knowledgeable: nurture a thirst for knowledge and apply cross -curricular skills.
* Be Adventurous: work practically cooking both inside and outside comfort zones.
* Be Ambitious: strive for improvement.
* Be Creative: develop creative thinking skills and question why
* Be Collaborative: work as a team to plan and cook a meal.
* Be Reflective: listen to and act on advice
* Be Positive: develop self-esteem
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In KS1:

Pupils should be taught to: ​

* distinguish between an object and the material from which it is made **(1-Everyday materials)**​
* identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock **(1-Everyday materials)**​
* describe the simple physical properties of a variety of everyday materials **(1-Everyday materials)**​
* compare and group together a variety of everyday materials on the basis of their simple physical properties **(1-Everyday materials)**
* identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses (2-Everyday materials)​
* find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (2-Everyday materials)

**Key Skills Coverage - Science**

**Prior Knowledge**

**Key Vocabulary**

**Key Scientific Skills**

**Solid:** firm and stable in shape; not liquid or fluid (does not change shape to fill a container)

**Liquid:** a substance that flows freely but is of constant volume, having a consistency like that of water or oil.

**Gas:** a substance or matter in a state in which it will expand freely to fill the whole of a container, having no fixed shape (unlike a solid) and no fixed volume (unlike a liquid).

**State:** a physical condition as regards internal structure (solid, liquid or gas).

**Melting:**  turn a solid into a liquid.

**Freezing:** liquid being turned into ice or another solid as a result of extreme cold.

**melting point:** the temperature at which a given solid will melt.

**boiling point:** the temperature at which a liquid boils and turns to vapour.

**evaporation:** the process of turning from liquid into vapour.

**temperature:** how hot or cold something is.

**water cycle:** the cycle of processes by which water circulates between the earth's oceans, atmosphere, and land, involving precipitation as rain and snow, drainage in streams and rivers, and return to the atmosphere by evaporation and transpiration.

**Knowledge:**

Pupils should be taught to: ​

* compare and group materials together, according to whether they are solids, liquids or gases (4-States of Matter) ​
* 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) (4-States of Matter) ​
* identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature (4-States of Matter) ​

**Working Scientifically:**

**Plan:**

*Set up an enquiry:*

Set up simple practical enquiries, comparative and fair tests.

Materials: drying materials (Y4)

KS1:

Locational Knowledge:

* Name and locate the world’s seven continents and five oceans
* Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas

Human and Physical Geography:

* Describe key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather.
* Describe key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.
* Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles use basic geographical vocabulary to refer to same.

Place Knowledge:

* understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country in Africa (Mugumareno Village, Zambia).
* Understand geographical similarities and differences through the study of places linked to other topic areas

**Prior Knowledge**

**Key Skills Coverage - Geography**

**Key Geography Skills**

Locational Knowledge:

* Locate the world’s rivers, using maps to focus on Europe (including the location of Russia) and North and South America. Look at famous rivers on a map e.g. Mississippi, Ganges, Nile, Thames, Amazon.
* Name and locate counties and cities of the United Kingdom.
* Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn.

Human and Physical Geography:

Describe and understand key aspects of:

* **physical**geography, including rivers 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 *(focusing on those aspects relating to rivers).*

Mapping:

* Use a wider range of maps (including digital), atlases and globes to locate features studied.
* Use maps and diagrams from a range of publications e.g. holiday brochures, leaflets, town plans.
* Use maps at more than one scale.
* Recognise patterns on maps and begin to explain what they show.
* Use the index and contents page of atlases.
* Label maps with titles to show their purpose.
* Recognise that contours show height and slope.
* Use four figure coordinates to locate features on maps.
* Create maps of small areas with features in the correct place.
* Recognise some standard OS symbols.
* Link features on maps to photos and aerial views.
* Use a scale bar to calculate some distances.

Fieldwork:

* Use the eight points of a compass.
* Observe, measure and record the human and physical features in the local area using a range of methods including sketch maps, cameras and other digital devices.
* Make links between features observed in the environment to those on maps and aerial photos.

Enquiry:

* Ask more searching questions including, ‘how?’ and, ‘why? as well as, ‘where?’ and ‘what?’ when investigating places and processes.
* Make comparisons with their own lives and their own situation.
* Show increasing empathy and describe similarities as well as differences.

 KS1 – National Curriculum

Design

• Design purposeful, functional, appealing products for themselves and other users based on design criteria • Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and where appropriate, information and communication technology

Make

• Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

• Explore and evaluate a range of existing products • Evaluate their ideas and products against design criteria

Technical knowledge

• Build structures, exploring how they can be made stronger, stiffer and more stable • Explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products

Cooking and nutrition

• Use the basic principles of a healthy and varied diet to prepare dishes • Understand where food comes from

**Prior Knowledge**

**Key Skills Coverage - DT**

**Key Design Skills**

Design:

* Propose realistic suggestions as to how they can achieve their design ideas.

Making:

* Make healthy eating choices.

Analyse the taste, texture and smell of foods.

* Develop understanding of how meat/fish is caught/reared.

Evaluate:

* Draw and sketch products to help understand more about the different food groups.

Technical Knowledge:

* Develop their sensory vocabulary and knowledge using their senses.

Cooking and Nutrition:

* Explore seasonality of vegetables/fruits. Find out which fruit and vegetables are grown.

Key Vocabulary:

Grown reared Local producer seasonal produce texture, smell, texture, appearance

**Key Skills Coverage – History**

**Prior Knowledge**

In KS1 children studied:

* changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life (the seaside, then and now)
* events beyond living memory that are significant nationally or globally (the Great Fire of London)
* the lives of significant individuals in the past who have contributed to national and international achievements (Christopher Columbus)
* significant historical events, people and places in their own locality.

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