BRABIN'S ENDOWED PRIMARY SCHOOL

Class: Oak Year 5/6 Term: Autumn 2 2025

Curriculum Unit –The Amazon

Key Learning Overview;-

Geography- Interconnecting Amazon: A study of the Amazon region with a focus on the indigenous people who live there.

History- a study of the life of Abel Heywood- Mayor of Manchester in the 1800's.

Science- Children will be able to build more complex working circuits and recognise and use the corresponding symbols.

DT- Children will be able to design and create and electrical system that incorporates structures, mechanical and computer systems.

Computing- To create vector drawings using software.

Writing Opportunities- we will write: a story based on another culture (South American), a discussion and create non-fiction speeches to share in a class debate.

Class Novel, key texts and extracts- Novel: The Explorer
Extracts: The Vanishing Rainforest, The Great Kapok Tree, Kenske's Kingdom and Deforestation reports

Curriculum Shapers

- Be Curious: develop an appreciation of and responsibility for the environment and experience contrasts with the Amazon
- Be Knowledgeable: develop subject specific language, manage, receive, record and apply information, nurture a thirst for knowledge and apply cross -curricular skills
- Be Adventurous: experience exhilaration, challenge and achievement
- Be Ambitious: see possibilities
- Be Creative: develop creative thinking skills and question why
- Be Collaborative: respect the opinions and difference of others and value one's own perceptions and others
- Be Reflective: make lifestyle choices in relation to learning and identify new aptitudes

Key Questions

- Where in the world is the Amazon Basin and in which countries is it located?
- How is the rainforest in the Amazon Basin changing? Why is the rainforest changing?
- How does this region of South America compare and contrast with regions we have studied before?
- What is an electrical circuit and which symbols correspond with each part?
- How can I create a product which incorporates electricity?

Key Skills Coverage - Science

Prior Knowledge

- Year 1/2: Uses of everyday materials
- Year 3/4: Forces and magnets
- Year 3/4: Light
- Year 3/4: Electricity:
- 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
- recognise that a switch opens and closes a circuit
- recognise some common conductors and insulators, and associate metals with being good conductors.

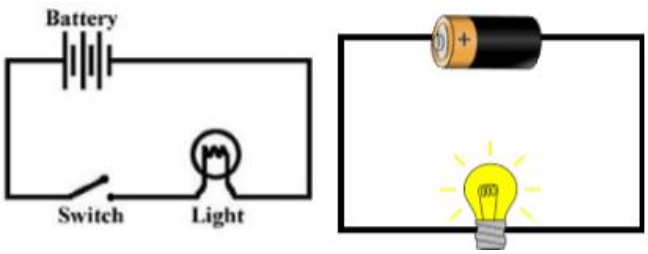
Key Scientific Skills

Knowledge

- 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 (at least: cells, wires, switches, bulbs, buzzers and motors) when representing a simple circuit in a diagram.
- Use and interpret circuit diagrams to construct a variety of more complex circuits predicting whether they will 'work'.

Working Scientifically

- By systematically identifying **[testing]** the effect of changing one component at a time in a circuit.
- By designing and making an item that includes an electrical component



Key Vocabulary

Electricity – a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for devices

Energy- the power from sources such as electricity that makes machines work or provides heat

Conductor- a substance that heat or electricity can pass through or along

Insulator- a non-conductor of electricity or heat

Current- a flow of electricity through a wire or circuit

Battery/cell- small devices that provide the power for electrical items such as torches

Bulb- the glass part of an electric lamp, which gives out light when electricity passes through it.

Motor- a device that uses electricity or fuel to produce movement

Switch- a small control for an electrical device which you use to turn the device on or off

Wires- a long thin piece of metal that is used to fasten things or to carry electric current

Buzzer- an electrical device that is used to make a buzzing sound

Key Skills Coverage - DT

Prior Knowledge

- Year 1/2: Mechanisms-pop ups and simple card levers
- Year 1/2: Mechanisms- axles and wheels
- Year 1/2: Structures- stability and strength
- Year 3/4: Mechanical Systems- levers and linkages
- Year 3/4: Control- electrical systems
- Year 3/4: Structures shell and frame- strengthening

Key Design Skills

Mechanical and Electrical Systems and ICT

Record ideas using annotated diagrams. *Complete drawings to refine ideas.*
Cut dowel, square section wood accurately to 1mm. *Build frameworks to support mechanisms.* *Make a structure that incorporates electrical, mechanical and computer systems.*
Identify strengths and weaknesses of their design and explain these. *Review their product and record how it can be improved.*
Understand that mechanical and electrical systems have an input, process and an output.

Key Vocabulary

Axle- Rod on which one or more wheels can turn.

Cam-Specially shaped wheel, or one with a hole off-centre; when it rotates, anything resting on its edge will bob up and down, as in a pull-along toy.

Dowel-Wood cut to a cylindrical shape, available in various widths.

Pulley-A grooved wheel over which a rope can run.

Shaft-A rod which transmits motion

Wheel-Circular frame or disc which rotates about a centre, enabling linear (straight-line) movement from circular motion.

Control-Process of making an action take place; computer control involves programming the computer so it will instruct a device to carry out an action

Framework-A structure made by joining together a number of pieces of wood, metal, card or plastic.

Linkage-A means of connecting components together usually so they can move.