

ALMOND HILL JUNIOR SCHOOL MEDIUM TERM PLAN

TOPIC TITLE/SUBJECT: Science-Electricity YEAR GROUP: 4 **TERM Autumn 2**

Vocabulary appliances, electricity, electrical circuits, cell, wire, bulb, buzzer, danger, electrical safety, sign, insulators, wood, rubber, plastic,

glass, conductors, metal, water,

switch, open, closed

Skills

Enquiry and working scientifically skills (LKS2)

- Asks relevant questions
- Sets up simple enquiries, comparative and fair tests
- Makes systematic and careful observations
- Gather and record data accurately in a variety of ways. Interpreting data.
- Makes statements on findings from enquiries using simple scientific vocabulary, drawings, labelled diagrams etc.
- Report findings both in written and oral form.
- Use results to draw simple conclusions, making new predictions and raising further questions.
- Identifies difference, similarities or changes related to simple scientific ideas and processes (Pattern seeking)

What we already know

As part of their general knowledge, some children may know some basic concepts about 'Electricity' including:

- Electricity powers many objects we use
- There is electricity in lightning
- Electricity runs through wires
- Electricity can charge electrical devices

KS1 – Knowledge and skills

- Y2/A1 Investigate different materials for a purpose
- Y2/Sp1 Everyday material, properties and uses
- Y2/A1 Observing first-hand experiences
- Y2/Sp2 Observe and describe

KS2 -Skills

- Y3/Sp2 Ask relevant questions
- Y3/Su 2 Gathering and record data, draw simple conclusions

Illustration











Application/ Outcomes

- Classify electricity as natural and man made
- **Identify** appliances
- Research electrical safety

Construction of a simple circuit

Identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Investigation

What changes to the components in a circuit affect the brightness of the lamp? E.g. buzzer, cell, double bulbs.

Plan, Make, evaluate

Plan a circuit to light a lamp based on understanding of different components. Present circuit in a simple pictorial representation.

Concepts

- Appliances and gadgets need electricity to work
- Electricity is a source of power (energy)
- Electricity can be provided through mains or batteries
- Electricity can be generated in different ways
- Electricity can cause injury or death
- Different materials can conduct or insulate electricity
- Switches are used to switch on/off the flow of electricity through a circuit.

Other/Cross Curricular Links

DT - design, make, evaluate

Adaptation for SEND

Differentiated worksheets, more images and pictures used to decrease need for writing Worksheets produced to decrease page organisation