The Hermitage School – Science		
Topic: Electricity	Year: 4	Summer 2

What should I already know?

- Electricity is a form of energy that can be carried by wires.
- Electricity is used to provide power for devices.
- Sources of light and sound may need electricity to work.

What will I know by the end?

- Appliances can run on main or battery power.
- Know some common appliances



- A complete circuit allows a current to flow through wires to make a bulb, buzzer or motor work.
- A switch can break or reconnect a circuit.
- A switch controls the flow of the electrical current.
- Know if a circuit is complete or incomplete.
- Some materials let electricity pass through them. These are called conductors.
- Some materials do not let electricity pass through. These are insulators.

Scientific Skills and Enquiry

- Identify electrical appliances.
- Construct simple circuits.
- Identify and name the components.
- Identify complete and incomplete circuits.
- Identify insulators and conductors.
- Understand how switches work.
- Record findings and draw conclusions.

Complete and incomplete Circuits



These are complete circuits - they have a battery (cell) and a component (bulb).

The wires are placed in the right places of the battery for the circuit to work.



These circuits will not work as they are incomplete.



Vocabulary Appliance—a device designed to perform a task. Battery— a device that stores electrical energy / power. Bulb— a device that provides light when electricity passes through it. Buzzer— an electrical device that makes a buzzing sound. Circuit—a complete route which an electric current can flow around. Conductor— any material that electricity can pass through or along. Current-the steady flow of electrons. Electricity— the flow of an electric current through a material to provide power. Insulator— any material that electricity cannot pass through or along. Generate— to make or produce. Mains—where the supply of electricity enters a building Motor— a device that uses electricity for movement. Socket—a device on a wall that you can plug electrical

Switch— a device for making and breaking a connection in a circuit, which turns the device on or off.

equipment into.

Wire—a length of material that conducts electricity.