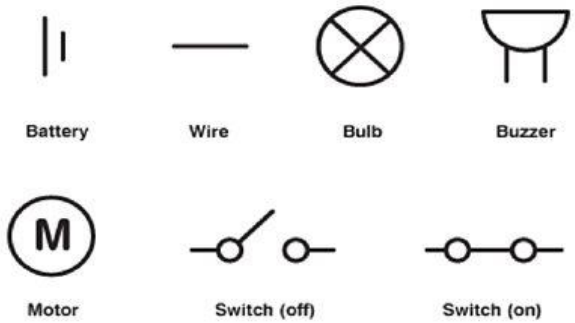
Springbank Primary School Knowledge Organiser

Year 4	Term: Autumn term 2	Focus - Electricity

Vocabulary	Definitions
Circuit	An electrical circuit is a complete pathway that an electrical current can flow around. Electrical current is the flow of electrons which are negatively charged particles. A circuit needs a power source and an unbroken path for the current to flow.
Cell/battery	A cell is a power source; it is a store of energy. Multiple cells connected together make a battery. It gives the electrons that are everywhere in the circuit a push so that they can move around the circuit. Cells/batteries run out of power when all their stored energy has been used up.
Wire	Wires are lengths of plastic covered metal with metal connectors at the ends. They are used to join components in a circuit.
Bulb	A bulb is an electrical component that lights up when an electrical current passes through it.
Buzzer	A buzzer is an electrical component that makes a sound up when an electrical current passes through it.
Motor	A motor is an electrical component that spins when an electrical current passes through it.
Switch	A switch is part of an electrical circuit that can be opened or closed to control the flow of electricity. If a switch is open (off) there is as break in the circuit and the current cannot flow. If the switch is closed (on) then the circuit is complete and the current can flow around the circuit.
Conductors	Electrical conductors are materials that allow an electrical current to flow through them. All metals such as copper, iron and steel plus graphite are conductors.
Insulators	Insulators are materials that do not allow electrical current to flow through them. Wood, plastic and rubber are all insulators.
Appliances	Appliances are machines that use electricity, some use mains electricity and others run on batteries.

Diagrams

Electrical circuit symbols



A circuit diagram