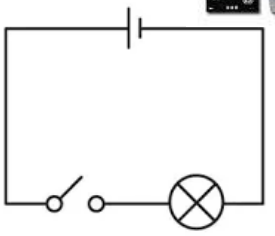
Year 4: Electricity Knowledge Mat

Subject Specific Vocabulary

circuit	An electrical circuit is a completed path through which an electrical current flows.
buzzers	A buzzer is an automatic signalling device. They are used as alarms and door bells.
conductor	A conductor is an object or type of material that allows the flow of an electrical current in one or more directions
battery	A battery is a device that stores chemical energy and makes it available in an electrical form.
cells	An electrical cell is a device that is used to generate electricity.
switch	A switch is an electrical component that can 'make' or 'break' an electrical circuit.
socket	Sockets allow electrical equipment to be connected to the alternating current (AC) power supply in buildings and at other sites.
appliance	An electrical appliance is a device that uses electricity to perform a function.
appliance series circuit	Components connected in series are connected along a single path, so the same current flows through all of the components.
insulator	An insulator is a material whose internal electric charges do not flow freely.

Working Scientifically

- ❑ Set up simple practical enquiries, comparative and fair tests.
- ❑ Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- ❑ Identify differences, similarities or changes related to simple scientific ideas and processes.
- ❑ Report on findings from enquiries using oral and written explanations, displays or presentations of results and conclusions.



Sticky Knowledge about electricity

- ❑ Electricity can be generated by from power stations, wind, the sun, water and even animal poo!
- ❑ Electricity is a type of energy that can build up in one place to flow to another.
- ❑ A power station is a place where electricity is created and sent to our homes.
- ❑ Electricity travels at the speed of light, which is more than 186,000 miles per hour.
- ❑ One flash of lightening could power 1000 houses for a whole year.
- ❑ Know the symbols for a simple circuit diagram – battery, bulb, switch, wires
- ❑ When an electric charge builds up on the surface of an object it makes static electricity. This is why we sometimes have a small electric shock.
- ❑ The first power plant opened in 1882 and was opened by Thomas Edison.
- ❑ Thomas Edison was a very famous inventor who helped us make the most of electricity from bulbs to fuses.