

## **Science-Physics**

## **Electricity Knowledge Mat**

## Year 4

## **Subject Specific Vocabulary Key Knowledge about Electrical symbols Electricity** electricity A form of energy. This energy can be used to power electrical appliances. Electrical ☐ Many household devices and energy is caused by electrons. Component Symbol appliances run on electricity. Some Purpose plug in to the mains and others run A buzzer is an automatic signalling device. buzzers Cell (Battery) Provides electrical energy They are used as alarms and door bells. on batteries. -0 0-Power supply Alternative to using cells A conductor is an object or type of material ☐ An electrical circuit consists of a conductors Wire Allows current to travel that allows the flow of an electrical current cell or battery connected to in one or more directions. Bulb/light Converts electrical energy into heat and light components using wires. -(M) Motor Converts electrical energy An electrical circuit is a completed path circuit into movement energy ☐ If there is a break in a circuit, a through which an electrical current flows. loose connection or a short circuit. Converts electrical energy Buzzer into sound energy the component will not work. An electrical cell is a device that is used to Allows circuit to be opened or cells Switch -00 generate electricity, or one that is used to ☐ A switch can be added to the make chemical reactions possible by applying electricity. circuit to turn the component on and off. switch A switch is an electrical component that Thomas Edison can make or break an electrical circuit. ☐ Metals are good conductors so A long, thin and flexible piece of metal. wire they can be used as wires in a Thomas Edison was a great American inventor who came up with a way of making the circuit. An electrical appliance is a device that uses appliance electric light bulb accessible for homes, electrify to perform a function. industry and outside in the streets. ☐ Non-metallic solids are insulators insulator An insulator is a material whose internal except for graphite (pencil lead). electric charges do not flow freely. Plastic, In his lifetime he came up with over 1,000 wood, glass and rubber are good electrical new inventions. insulators. motor A motor converts electrical energy into Thomas Edison was born in 1847 and died in physical movement. 1931. A device made of rounded glass used to bulb create electric light.