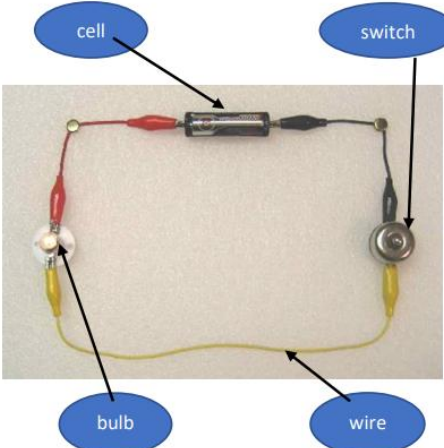
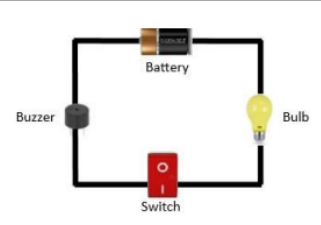
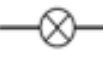
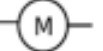
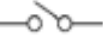


What do we know already:	Vocabulary:		
*I know that electricity is a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for devices . *I know sources of light and sound may need electricity to work.	Tier 1	Tier 2	Tier 3
What's next: *I will learn where electricity comes from. *I will learn which appliances run on electricity *I will learn how an electrical circuit works. *I will name the basic parts of an electrical circuit including, cells, batteries, wires, bulbs, switches, motors and buzzers. *I will learn how to draw circuits using pictorial representations. *I will learn which materials insulate and conduct electricity. *In Year 6, I will learn that how to make a lightbulb shine brighter.	Bulb Switch Wires Mains	Electricity Battery Buzzer Cells Circuit Motor Conductor Insulator Appliance Energy	Cells - a single unit for converting chemical or solar energy into electricity.
			Component - the parts that something is made of.
			Current - a flow of electricity through a wire or circuit.

Which common appliances run on electricity?	What are the basic parts of an electrical circuit?	How does a series circuit work?	How are the components represented as symbols?	What are electrical conductors and insulators?
*Electricity is generated using energy from natural sources such as the Sun, oil, water and wind. These can also be called fuel sources. *Some appliances use batteries and use mains electricity. *Batteries come in different sizes depending on how much and for how long the appliance is used. Washing Machine Dishwasher Blender Oven Refrigerator Pressure cooker Kettle Iron Vacuum cleaner Mixer Electric fan Lamp Microwave Coffee machine Television	Electrical circuit with a bulb  The switch opens and closes the circuit. The bulb lights in this circuit because the switch is on.	In a series circuit all the components are joined together, and the electricity can only flow in one direction . Switches can be used to open and close circuits. This circuit is complete so the buzzer will sound and the bulb will light.  However, a circuit will not work properly if the cells aren't connected correctly (+ to - not ++ or - -). If a component isn't working or there's no bulb. If the circuit has gaps or if one of the components acts as an insulator.	  BULB   BUZZER   MOTOR   WIRES   BATTERY/CEL   SWITCH	An electrical conductor lets electricity pass through it. They are often metal (e.g. iron, copper and gold) but also include carbon and water. As our bodies are 18% carbon, electricity is very dangerous to us and because water is a very good conductor of electricity we mustn't use electrical appliances near it! An insulator doesn't let electricity pass through it, e.g. wood, leather and plastic. Plastic is used to cover electrical wires because it is a good insulator. Electrical Conductors  Electrical Insulators 