
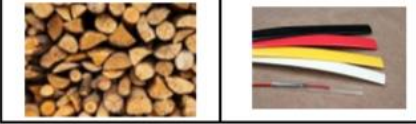


Year 4: Electricity Knowledge Mat

Subject Specific Vocabulary		Conductors and Insulators	Important Knowledge
electricity	A form of energy used for lighting, heating, making sound and making machines work.	<p>Conductors Some materials let electricity pass through them easily. These are known as electrical conductors. Many metals are good electrical conductors, such as iron, copper and steel.</p>  <p>Insulators Some materials do not allow electricity to pass through them. They are known as insulators. Plastic, wood, rubber and glass are good electrical insulators.</p> 	<ul style="list-style-type: none"> <input type="checkbox"/> I can name common appliances that run on electricity. <input type="checkbox"/> I know how to a simple series electrical circuit, identifying and naming its basic parts: cells, wires, bulbs, switches and buzzers. <input type="checkbox"/> I know whether or not a lamp will light in a simple series circuit. <input type="checkbox"/> I know that a switch opens and closes a circuit. <input type="checkbox"/> I know some common conductors and insulators. <input type="checkbox"/> I know that metals are good conductors. <p>Working Scientifically</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can sort devices to show which are run on electricity and which do not. <input type="checkbox"/> I can work with a group to suggest questions that can be investigated further. <input type="checkbox"/> I can use of a range of criteria for grouping, sorting and classifying and can explain how my ideas link scientifically. <input type="checkbox"/> I can record my observations, data and results using clear scientific vocabulary and symbols in tables.
electrical circuit	This consists of a cell or battery connected to a component using wires. It needs to be a complete circuit to work.		
cell	A cell is a single unit of electrical energy.		
battery	A battery is a collection of cells.		
electrical component	A part that combines with others to form a circuit. E.g. bulb, motor, buzzer.		
switch	Can be added to a circuit to turn a component on or off. It allows the electricity to flow or it stops it.		
conductor	Material that allows electricity to pass through.		
insulator	Material that does not allow electricity to pass through.		
electrical appliance	A machine or device that runs on electricity.		
motor	A device that uses electricity or fuel to produce movement.		

