**Knowledge Mat: *Science Electricity Spring 1***

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| ***Vocabulary*** | | **Electrical Appliances Mains Power**  Most big appliances in our house have to be **plugged in**. These are **powered by mains power**. Some **smaller appliances** can be **powered by batteries**. Some appliances have **batteries** that need to be **charged by mains power**. **Lots of appliances around our house use electricity to work.**  **Battery Power**  **Battery powered appliances are portable** which means you can use it anywhere without it having to be plugged into a plug socket. There are **different types of battery** for different appliances. | | **Mains Power**  **Mains power** is produced mainly in a **gas, coal or nuclear power station. Wind turbines, solar panels and hydroelectric dams** are also used to produce mains power but are not used as often.    **The electricity then travels** from the power stations to our houses **through overhead wires and pylons**. We use the electricity in our house by plugging the appliance into a **plug socket**. Finally, the electricity enters the appliance’s electrical circuit through the **wires**. |
| **Appliance** | a device or piece of equipment that has been made to perform a specific task. |
| **Battery** | a small item used to power small appliances. |
| **Circuit** | a route through which electricity flows. |
| **Components** | the parts of a circuit. |
| **Conductor** | allows electricity to flow through it. |
| **Electrical** | something that uses electricity to work. |
| **Insulator** | doesn’t allow electricity to flow through it. |
| **Mains power** | electricity provided by power stations. |  | **Switches**  **When we put a switch in** an electrical circuit and turn it to the **on position**, it **completes the circuit** and **allows electricity to flow** around the circuit. When we turn the switch to the **off position**, this creates a **break in the circuit** meaning the **electricity cannot flow anymore** and the appliance will not work. | |
| **Portable** | can be easily carried around. |
| **Pylon** | a tower used for keeping electrical wires above the ground. |
| **Oscar and the Bird: A Book about Electricity (Start with Science) : Waring,  Geoff, Waring, Geoff: Amazon.co.uk: BooksBook** | |