Keywords: Autumn 1 Science

Topic Title:

Introduction to the topic: Why are you learning it and how does it link to what you've learned before?

This topic examines how everyday items are able to function including electric motors commonly used in many appliances.

What lessons will you cover during the topic?

- **Magnetism and magnets**
- **Solenoids and electromagnets**
- **Motor effect and inductions**
- **Generators and transformers**

Keyword	Definition
Solenoid	A straight coil of wire which can carry an electric current to create a magnetic field.
Induction	The production of a potential difference (voltage) when a conductor, such as a wire, is moved through a magnetic field or exposed to a varying magnetic field. If the conductor is part of an electric circuit, an induced current will flow.
Magnetic	Able to be magnetised or attracted to a magnet.
Motor effect	The effect where a force is exerted on a wire carrying a current in a magnetic field.
Transformer	An electrical device that increases, or decreases, the potential difference (voltage) of an alternating current.

Field Line	**What are drawn to show the strength and direction of a magnetic field**
Core	**What is places inside a coil of wire to increase the strength of an electromagnet**
Pole	**The strongest part of a magnet**
Magnetic field	**Area surrounding a magnet that can exert a force on magnetic materials.**