



Year 3 Knowledge Organiser Static Electricity

Key Knowledge

What is Static Electricity?

It is the build up of an electrical charge on the surface of an object. All objects contains charges (positive and negative). Charges can pass between objects when you rub them together (friction). After this, the charge is imbalanced. When charged objects meet, they will move either repel or attract.



Lighting is also an example of Static Electricity.

Key Knowledge

How is Static Electricity used?

It is used in printers and photocopiers where static electric charges attract the ink, or toner, to the paper. Other uses include paint sprayers, air filters, and dust removal.

Magnetic forces

When two magnets are close, they create pushing or pulling forces on one another. These forces are strongest at the ends of the magnets. The two ends of a magnet are known as the north pole and the south pole.

Same poles repel

If you try to put two magnets together with the same poles pointing towards one another, the magnets will push away from each other. We say they repel each other.

Different poles attract

If you put two magnets together with different poles pointing towards one another, the magnets will pull towards each other. We say they attract each other.



Vocabulary

Static Electricity - the build-up of an electrical charge on the surface of an object.

Electric Charge - the physical property of matter that causes it to experience a force when placed in an electromagnetic field. There are two types of electric charge: positive and negative.

Magnets – have a north and south pole. Opposite poles attract each other, the same poles will repel each other.

Attract – When two magnets go towards each other and join.

Repel - When two magnets push away from each other.

Design criteria - A list of things a product must do to be successful.

Target audience - A group of people that a product is designed for.

I Can...

I can describe and create static electricity to move objects in a direction	
I can create a design criteria based on the requirements/preference of the target audience, draw and label a design for a game which meets the users needs and communicates game rules/instructions.	
I can use a range of materials and equipment to make a game which uses static electricity	
I can reflect upon what makes a successful game and describe how successful a game is based on the agreed criteria	