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| **Forces and Magnets** |
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| **Overview of unit / topic** |
| In this unit, children will learn about forces, friction and magnets. They will learn about forces in the context of pushing and pulling. Children work scientifically and collaboratively to investigate friction. They will identify magnetic materials and will conduct an investigation into the strength of magnets. They will explore how magnetic poles attract and repel. |
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| **Key Questions** |
| * What materials are attracted to magnets? * When and where are magnets useful? * How strong are magnets? * Are all magnets the same strength? * Will a magnet attract plastic covered paperclips? * What if everything was magnetic? * How can we make objects move? * How can we stop things moving? * How can we change the movement? * How can we slow down a moving object? * Do different surfaces make a difference? * What if we could only push but not pull? |
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| **Key Vocabulary** |
| **Force –** a push or a pull on an object  **Gravity –** the force that pulls two objects towards each other.  **Friction –** the force that helps surfaces grip to each other  **Magnet -** a material or object which creates a magnetic field  **Magnetism –** the force of attraction and repelling cause by a magnet  **Poles-** 2 sides of a magnet where the magnetism is strongest  **Attract-** to pull towards  **Repel-** to push away  **Surface-** the top layer of an object  **Force meter –** an instrument used to measure forces |
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| **Key Knowledge and Understanding:**  **What will we be learning about in this unit / topic?** |
| To explore what forces are and notice that some forces need contact between two objects.  To compare how things move on different surfaces.  To explore how magnetic forces work.  To be able to identify magnetic materials.  To investigate uses for magnets. |