**St Mary’s C of E Primary School, Writhlington**

 *‘Inspiring Learning Together’*

**Scheme of Work + Knowlegde Organiser**



**Key Vocabulary:**

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| **Spelling** | **Definition/Sentence** |
| **Force** | A push or pull acting on an object  |
| **Direction** | A course along which something moves  |
| **Strength** | How strong something is  |
| **Forward** | A direction that is facing or travelling towards the front |
| **Backwards** | A direction that is facing or travelling towards the back |
| **Magnet** | An object which produces an area of magnetic force around itself  |
| **Attract** | Exert a force on an object that is directed towards the source |
| **Repel** | A drive or force back or away |
| **Predict** | Say or estimate what will happen |

**Wider Curriculum**: PE and movement

**The Learning Journey:**

**Which forces act upon objects?**Children receive a letter from a scientist who requires their help with science. Children investigate push and pull forces.

**Which materials are magnetic?**Children to sort different household items depending on whether they are magnetic or not.

**Do different conditions effect the strength of a magnet?**Children to consider what might effect the strength of a magnet. Using some of these ideas, children to design their own experiment to test a prediction.

**Can I investigate the effects of friction on different surfaces?** Children to use toy cars to test some fabrics create more friction than others.

**Can I use my knowledge of magnets to design and create a game?**Children to design their own magnet game, thinking about the material they mat use, the time available and the amount of detail to their game.

**Knowledge outcomes:**

Compare how things move on different surfaces

Notice that some forces need contact between two objects, but magnetic forces can act at a distance

Observe how magnets attract or repel each other and attract some materials and not others

Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials

Describe magnets as having two poles

Predict whether two magnets will attract or repel each other, depending on which poles are facing

**May the force be with you! (Forces and Magnets)**