Forces and Magnets KNOWLEDGE ORGANISER

RROOK LONG

ESSENTIAL FORCES AND MAGNETS VOCABULARY

| force | a power or strength that can cause an object to move |
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| friction | the force that pulls backwards when objects rub against each other |
| motion | the process of movement |
| texture | the feel or look of a surface |
| magnet | an object that can pull some metal items towards it |
| attract | to pull towards |
| repel | to force back or push away |
| magnetic field | the force that surrounds a magnet and attracts magnetic objects |
| non-contact force | a force that occurs without objects touching each other |
| magnetism | the force of a magnet |
| compass | an instrument which shows direction |
| orienteering | a sport where you have to find your way across a route with the aid of a map and compass |
| push | move forward by using force |
| pull | move backwards by using force |
| squash | crush or squeeze something with force so it becomes flat, soft or out of shape |

HOW DO MAGNETIC POLES WORK?

The ends of a magnet are called poles. One end is called the north pole and the other end is called the south pole. Opposite poles attract; similar poles repel. If you place two magnets so the south pole of one faces the north pole of the other, the magnets will move towards each other. This is called attraction. If you place the magnets so that two of the same poles face each other, the magnets will move away from each other. They are repelling each other.





• Forces act in opposite directions to each other.

FORCES

- When an object moves across a surface, friction acts as an opposite force. Friction is a force that holds back the motion of an object.
- Some surfaces create more friction than others, meaning that objects move across them more slowly.
- On a ramp, the force that causes the object to move downwards is gravity.
- Objects move differently depending on the surface of the object itself and the surface of the ramp.



Uses of everyday

materials (Y2)

Uses of everyday

materials (Y2)

Uses of everyday

materials (Y2)

MAKING LINKS TO PREVIOUS LEARNING GOLDEN VOCABULARY

To move something, you should **push** it.

To bring something closer to you, you

need to **pull** it.

Before recycling, you should wash and

squash the cans and bottles.