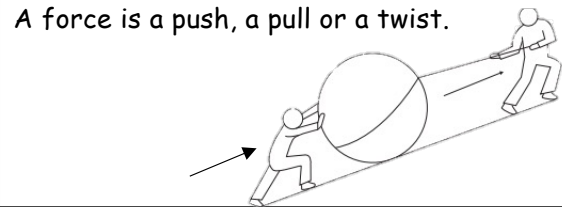




Vital Vocabulary

force
 contact force
 non-contact force
 friction
 magnetism
 magnet
 north pole
 south pole
 magnetic material
 non-magnetic material
 attract
 repel
 Electromagnet



A force is a push, a pull or a twist.

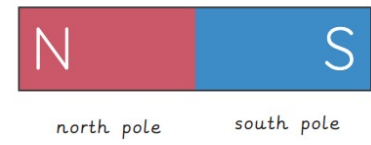
- Forces can have the following effects:
- Start an object moving.
 - Change the direction of a moving object.
 - Speed a moving object up.
 - Stop an object from moving.
 - Slow a moving object down.
 - Change the shape of an object.

Key knowledge – What will I know by the end of this unit?

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> ✓ Examples of contact and non-contact forces. ✓ That some forces are a result of contact between two surfaces but some forces can act at a distance (e.g. magnetism). ✓ The magnets have a north and south pole. ✓ Some examples of magnetic materials, including iron and nickel, and how they react to a magnet and each other. | <ul style="list-style-type: none"> ✓ Some different examples of magnets, including bar, horseshoe, button and ring. ✓ Some uses of magnets. ✓ Friction is a contact force that acts between two surfaces to slow an object down. ✓ Magnetism is a non-contact force that affects objects containing magnetic metal. | <ul style="list-style-type: none"> ✓ Understand that the opposite poles of a magnet attract one another and like poles repel one another. ✓ That rougher surfaces have more friction between them than smoother surfaces. ✓ That the strength of different magnets may vary. |
|--|---|---|

Magnetic materials are attracted to a magnet. Iron and nickel are magnetic metals. Objects that contain them will be attracted to a magnet.

Magnetism is the non-contact force that comes from a magnet.



Friction is useful for:



Magnets have a **north pole** and a **south pole**. The opposite poles of magnets attract and like poles repel.

