Knowledge Organiser: Forces and Magnets



. I know the difference between contact and non-contact forces. Vocabulary friction, air resistance, non-contact forces, force, contact force



2. I know how things move on different surfaces. Vocabulary - motion, texture, resistance, tilt, surface



3. I know there are different types of magnets. Vocabulary - Vocabulary – repel, magnet, horseshoe magnet, attract, bar magnet.



4. I know the properties of magnets and everyday objects that are magnetic. Vocabulary - iron, magnetic field, steel, magnetism, magnetic



5. I know that magnetic forces work at a distance. Vocabulary - non-magnetic materials, attract, magnetism, recycle, non-contact forces



6. I know the veryday uses of magnets. Vocabulary - magnetic north, magnetic needle, compass, direction, orienteering

Forces

- Forces act in opposite directions to each other.
- 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.





Glossary



force	a power or strength that can cause an object to move
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