

Forces and Magnets



This project teaches children about contact and non-contact forces, including friction and magnetism. They investigate frictional and magnetic forces, and identify parts of a magnet and magnetic materials.

- Pushing and pulling forces;
- Contact forces; Non-contact forces;
- Friction;
- Force meters;
- Bar charts;
- Magnetism; Magnetic attraction and repulsion; Magnetic fields; Magnetic properties; Magnetic Earth;
- Uses of friction and magnetism;
- Working scientifically – identifying and classifying, pattern seeking, comparative tests, research

Children will learn what forces are and what they do. They will learn about pushing and pulling forces and sort different actions into pushes and pulls. They will identify and explain contact forces. They will learn about and investigate frictional forces. They will use force meters to measure the forces needed to carry out everyday tasks and record their measurements. They will learn about magnetism (a non-contact force) and explore bar magnets. They will find out about magnetic attraction, repulsion and magnetic fields. They will test the magnetic properties of different objects. They will learn about the magnetism of the Earth and how this enables compasses to work. They will use this knowledge to make compasses. They will learn about the uses of friction and magnetism and carry out research. They will use different methods to investigate the strength of magnets.