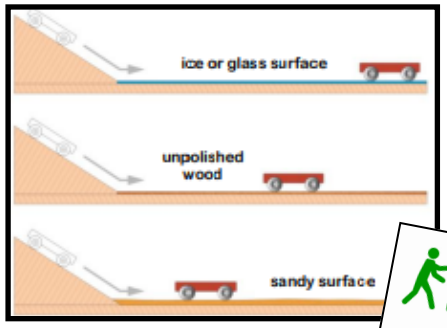
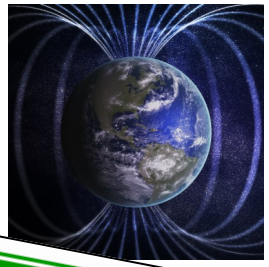
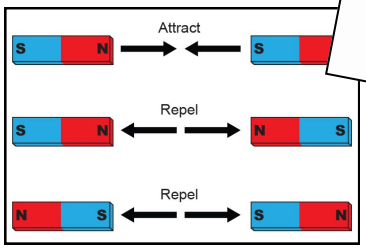
Forces and Magnets!

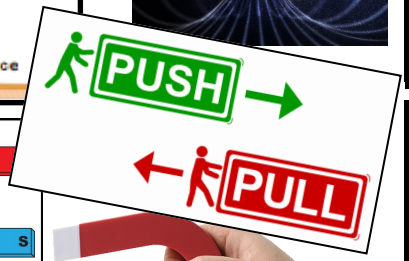
Subject Specific Vocabulary

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









By the end of this topic I will explore...

- What forces are, including contact and non-contact forces.
- What magnets are and how they work.
- Magnetic materials, including investigating which materials are magnetic and which are not.
- How we can use magnets to help us.
- What friction and air resistance are.
- How different textures on a surface affect the amount of friction that affects a moving object.

What do I already know?:

KS1:

Everyday materials - identification and naming materials, comparing and grouping using their properties, describing them, identifying a use for materials, changing materials.

Links to the National Curriculum and Progression:

See our Working Scientifically Maps in the front of our books!

National Curriculum - Science- KS2

- compare how things move on different surfaces
- notice that some forces need contact between 2 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 2 poles
- predict whether 2 magnets will attract or repel each other, depending on which poles are facing