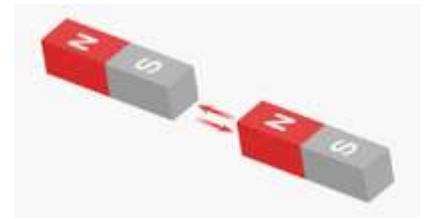


Roby Park Primary School Year 3

Physics

Magnets & Forces



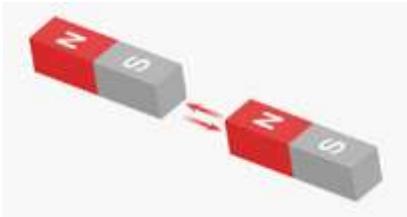
What we already know

- ✓ The shape of some materials can be changed when they are stretched, twisted, bent and squashed.
- ✓ Know how different toys move.
- ✓ Know what a force is and be able to explain that a push and pull are types of forces.
- ✓ That when forces are applied to an object they allow them to move or stop moving.
- ✓ The strength of the force determines how far and fast an object moves.

We are learning to:

- Compare how things move on different surfaces.
- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.
- 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.

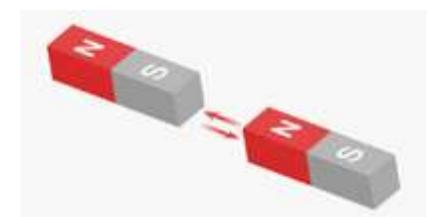




Roby Park Primary School Year 3

Physics

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Key Vocabulary

Force - a push or pull upon an object which can cause it to change its shape, direction of movement, speed up or slow down. **Friction** - is the resistance of motion when one object rubs against another. **Attraction** - the force by which one object attracts another.

Repulsion - the force by which one object repels another.

Gravity - gravity makes things fall down towards the centre of the Earth. In space there is less gravity because the earth, stars and other planets are far away. That is why astronauts float in space.

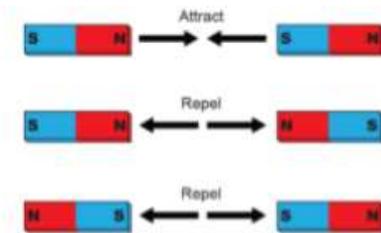
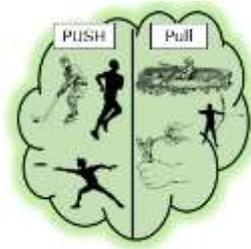
The Power of Five

Magnetic poles

Magnets have two poles: a north pole and a south pole.

They are usually on the opposite ends of the magnet.

North and south poles attract each other (meaning they move closer to each other). However, two north poles will repel each other, as will two south poles.



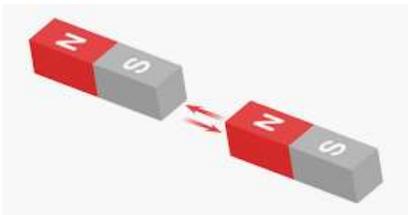
Forces are pushes and pulls. These forces change the motion of an object. They will make it start to move or speed up, slow it down or even make it stop.

Which materials are magnetic? Objects that are magnetic, are attracted to magnets. Iron and steel are magnetic. Aluminium and copper are non-magnetic.

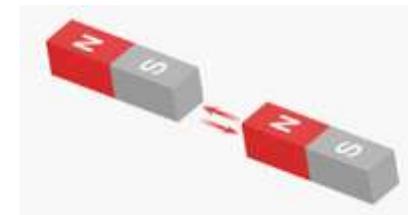
Investigate!

Explore how toys can move and learn that a force is any push or pull that makes something move. Record results and decide the best surface for playing bowls. Explore magnets and identify three facts about them to share with the class. Learn that magnets can attract and repel other materials





Roby Park Primary School Year 3
Physics
Magnets & Forces



3Ws What is motion?

Which force pulls objects towards the ground?

What is created when friction occurs?

VOCABULARY UNSCRAMBLE

t m n a g e
a metal object that possesses an attractive force to other metals.

t y v a i g r
makes things fall down towards the centre of the Earth.

n r e o i p s u l
the force by which one object repels another.

3 2 1

Name 3 types of surface

.....
.....
.....

List 2 name 2 surfaces to cause friction

.....
.....

Recall what one end of a magnet is called.

.....



Name 5 forces



Speedy Pencil. Write as much as you can remember in 5 minutes



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