

Magnetism



Created by Marie @ [The Homeschool Daily](#)



Important terms to know...



Magnet

A stone or a piece of metal that attracts some other metal.

Attract

To pull towards each other.

Repel

To push away from each other.

Poles

The ends of a magnet.



Lodestones



The first magnets were called Lodestones. Lodestones are natural magnets that are made of a mineral called magnetite. Long ago, these lodestones were thought to have magic powers. Their power is called magnetic force.



Not magic...
MAGNETIC!

Types of Magnets

wand magnet



bar magnet



horseshoe magnet

doughnut magnet



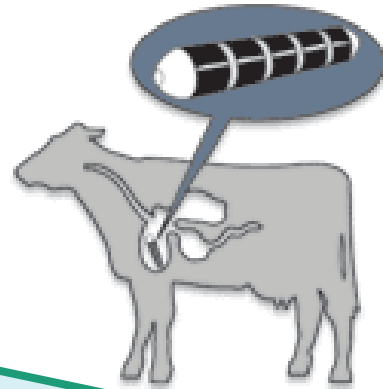
What are some uses for magnets?



Televisions, computers, and microwave ovens all operate with magnets.



They are used to slow down roller coasters and subways.



Magnets are used to keep refrigerator doors closed.

Magnets are even placed in the stomachs of cows to catch metals!

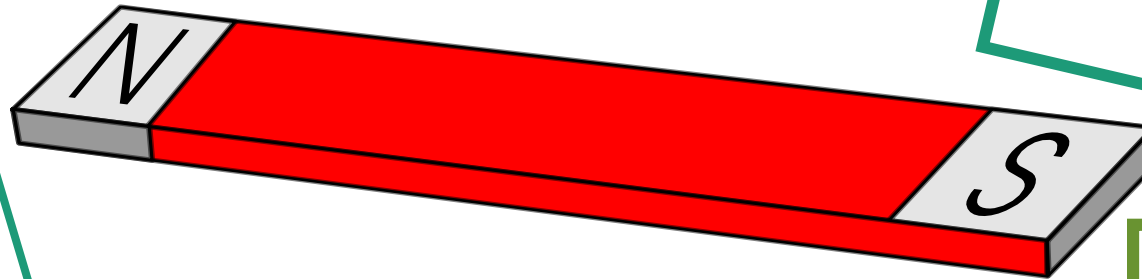


Magnets are in most electronic devices, in fact, anything that has a motor uses a magnet.

What are the characteristics of magnets?

They are usually made of iron.

They can attract some materials.



They have two ends called magnetic poles.

They can also repel other magnets.

What about the poles?

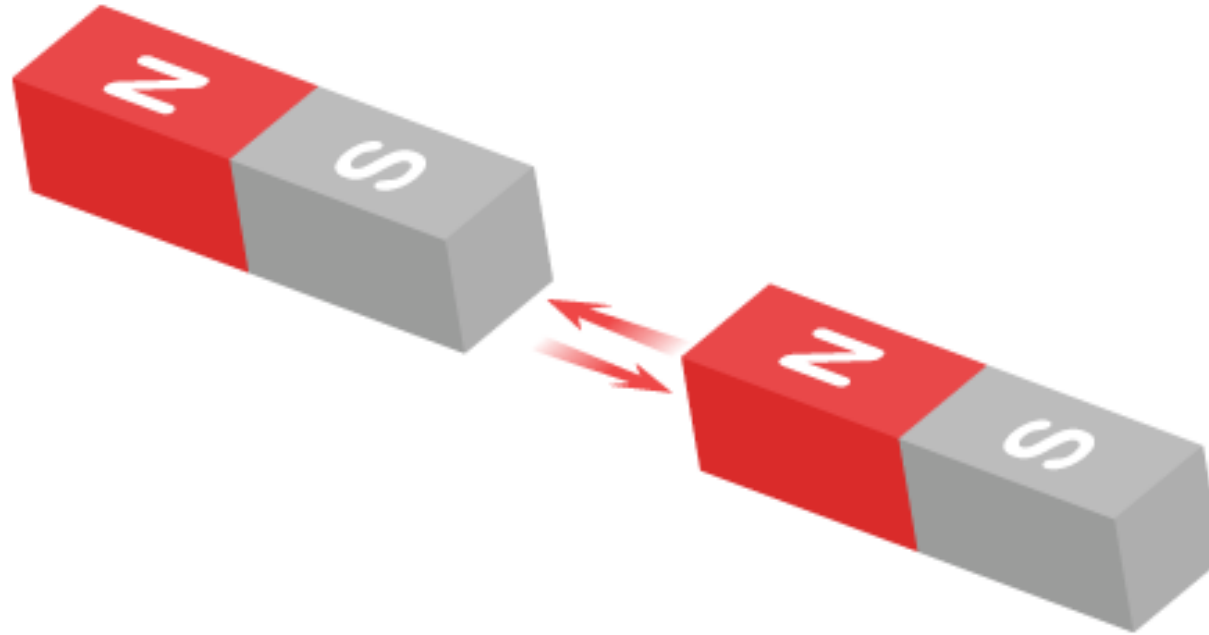
The **blue** end of a magnet is usually the **south** pole.



The **red** end of a magnet is usually the **north** pole.

Every magnet has at least one north pole and one south pole.

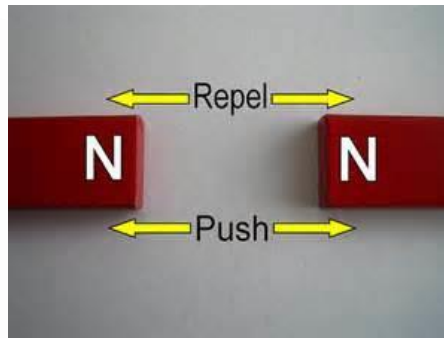
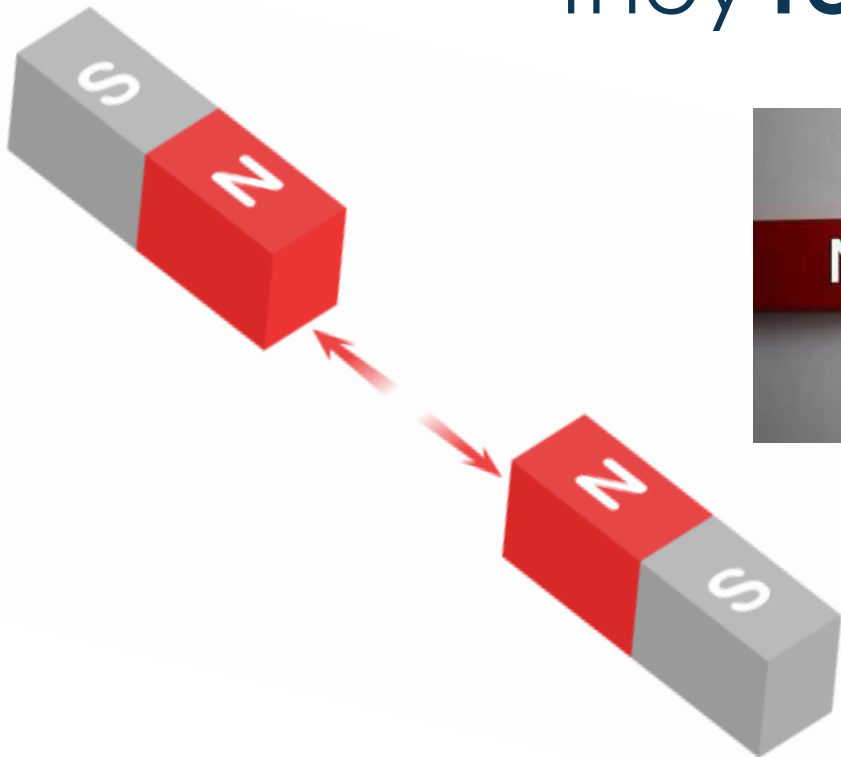
When two magnets are close, they create pushing or pulling forces on one another.



These forces are strongest at the ends of the magnets. The two ends of a magnet are known as the **north pole** and the **south pole**.

Same poles REPEL

If you try to put two magnets together with the same poles pointing towards one another, the magnets will push away from each other. We say they **repel** each other.

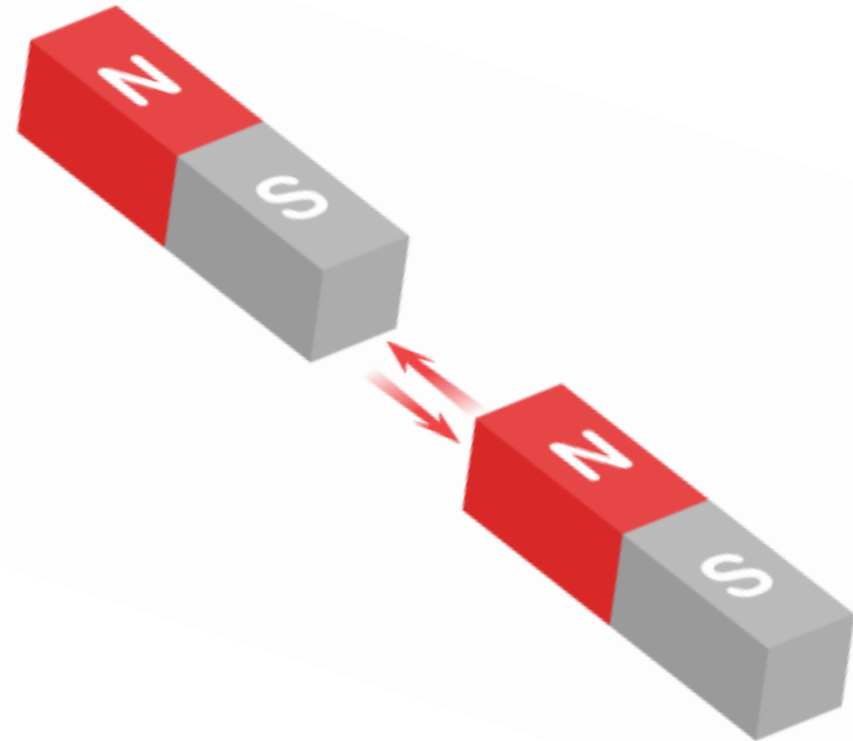


In this picture two north poles are pushing away from each other (repelling each other).

Different poles ATTRACT

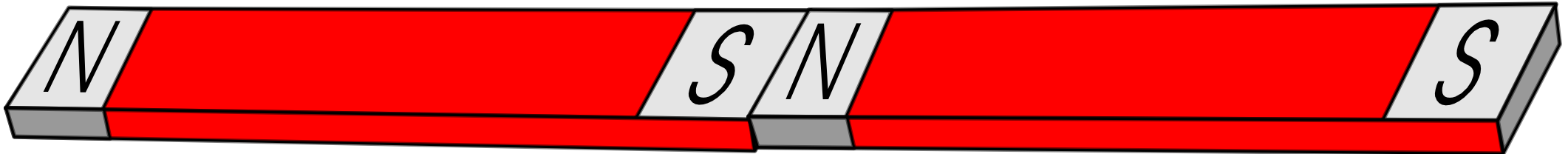
If you put two magnets together with different poles pointing towards one another, the magnets will pull towards each other. We say they attract each other.

In this picture a north and a south pole are pulling towards each other (attracting each other).



What did we find out?

We know that “like” poles **repel** each other and that “opposite” poles **attract** each other.



They do this because there is a **FORCE** between them.

Did you know?

Magnets can attract other magnets, but they can also attract magnetic materials.

Magnetic materials are always metals, but only a few metals are magnetic:

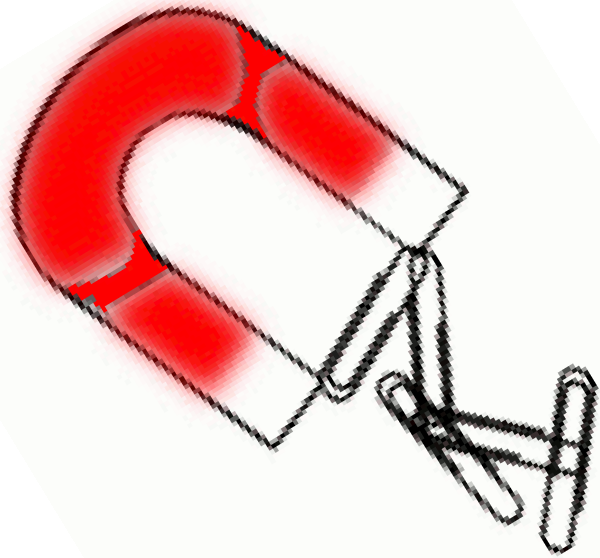
IRON

NICKEL

COBALT



Iron **IS** magnetic, so any metal with iron in it will be attracted to a magnet. Steel contains iron, so a steel paperclip, for example, will be attracted to a magnet.



Most other metals, for example aluminium, copper and gold, are **NOT** magnetic. An aluminium drinks can, for example, will not be attracted to a magnet.



What is Magnetic?

Home Lab

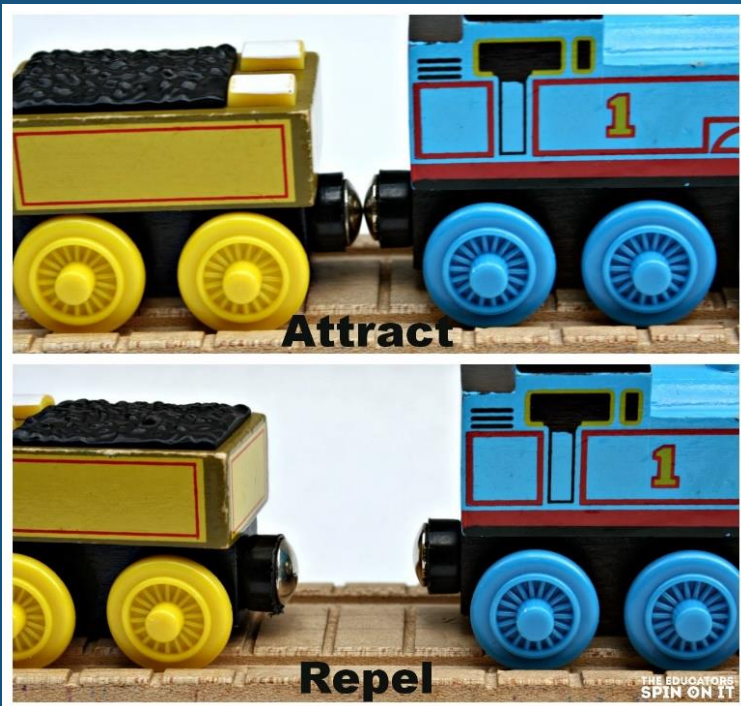
It is your turn to investigate magnetism! Ask your parent or teacher to help you find a magnet. Using your magnet, try to find at least 8 things that are magnetic. Find 8 things that are not magnetic.

Do not put a magnet to a television screen. It may not harm yours, but some magnets can temporarily distort your T.V. screen. BEWARE...



DOWNLOAD THE "WHAT IS MAGNETIC" LAB @ [THE HOMESCHOOL DAILY UNDER SCIENCE](#) 😊

Check out our other learning resources at **The Homeschool Daily!**



Blessed is the man that
walketh not in the counsel of
the ungodly, nor standeth in
the way of sinners, nor sitteth in
the seat of the scornful.
Psalm 1:1