Magnet Fun

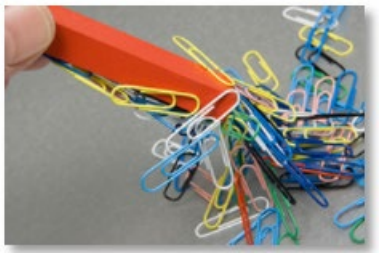
by Kristen Kunkel

They are hidden in your refrigerators, washing machines, TVs, and computers. Do you know what they are? Do not be afraid. They are only magnets.

All Shapes and Sizes

Magnets come in all shapes and sizes. They can be round or square. Some have a horseshoe shape. Some are shaped like donuts. Some magnets are tiny. Some are huge. Magnets can be painted different colors, too.

Things in Common



Could a magnet pick up plastic paperclips?

A magnet is a piece of metal. It can attract another piece of metal to it. All magnets are alike in some ways.

Magnets are made of metal. Most magnets are made of iron or steel. Magnets can only attract an object made of iron, steel,

cobalt, or nickel. That is why you can pick up paper clips and nails with a magnet. They are made of these metals. A magnet cannot pick up a toothpick. It is made of wood. It cannot pick up a plastic button. A magnet cannot pick up a wax crayon. Objects are called *magnetic* if a magnet can attract them.

All magnets have poles, too. A *pole* is the place on a magnet where the force is strongest. Magnets have a north pole and a south pole. If you have two magnets, it is fun to observe what happens when you put them next to each other. If you place the north pole of one magnet near the north pole of a second magnet, the magnets will repel, or push away. No matter how much force you apply, the same poles of two magnets will not attract. As soon as you turn one magnet so that opposite poles are near each other, the magnets will snap together. Opposite poles attract.

Earth Is a Magnet

Did reading about the north and south poles on a magnet make you think about Earth's North Pole and South Pole? If it did, there's a good reason. Earth is a huge magnet, and like other magnets, it has a north and a south pole. That is why a compass needle always points to the north. The needle of a compass is a magnet. The Earth's north pole attracts the compass needle.

Everyday Useful Magnets

A compass is powered by magnetism.

Many objects in our homes and at work use magnetism. There are many objects in our kitchen that have magnets. If you have used an electric can opener, you saw a magnet work. After the can opener cuts the lid off the can, a magnet attracts the metal lid. You have seen another magnet at work when you close the door of a refrigerator. A magnet in the door attracts a magnet in the door frame so the door stays closed.

Some popular toys use magnets, too. One of these toys features a blank face and a lot of iron shavings. Clear plastic covers the face to keep the iron shavings from falling off. To play, you shake iron shavings to scatter them. Then, you use a magnet to pull the iron shavings onto the face to make hair. It's a lot of fun! Where else have you seen magnets?

Make Your Own Magnet

You can make a magnet, but it won't last long. You will need a magnet and something magnetic, such as a nail. Take the magnet and rub it along the magnetic object. Always rub in the same direction. Do this at least twenty times. Then, test your new magnet. Will it pick up another magnetic object? It should! See how long your magnet keeps its magnetism. Do other tests. How can you make your magnet stronger? How can you make it last longer? Send us a video of your experiment. We want to see!

The End