615-0175 (20-100) "Floating" Magnet

Warranty and Parts:

We replace all missing or defective parts free of charge. For additional parts, use part numbers above. We accept Mastercard, Visa, checks, school P.O.'s. All products guaranteed free from defect for 90 days.This guarantee does not include accident, misuse, or normal wear and tear.

Introduction:

Lodestone, with its wonderful property of attracting and holding small pieces of iron and other lodestone, has been known since ancient times. For instance, it was mentioned in the writings of Thales of Miletus, dating back about 600 B.C. Some evidence exists that it may have been known as far back in antiquity as 1200 BC, since legends and myths concerning magnets and magnetism occur in early literature. Lodestone was found in large quantities in the part of the ancient land of Asia Minor called *Magnesia*, from which it became known in Greece as *magnes lapis*. From *magnes comes* the words magnet and magnetism.

Lodestone is a black ore of iron (Fe_3O_4) that is now called *magnetite.* Pieces of this ore can attract and hold other pieces of the ore and also bits of iron nearby. In the course of time it was discovered that a piece of lodestone - a *natural magnet* - could give this property of attraction to pieces of hardened iron that came into contact with it without losing any of its own strength. This is how *artificial magnets* were produced.

Nowadays electric currents provide a more effective method of making artificial magnets. Artificial magnets which lose their magnetism quickly after they are removed from the influence of the magnet or electrical current are *temporary magnets.* Those retaining their magnetic properties are *permanent* magnets.

How to Use:

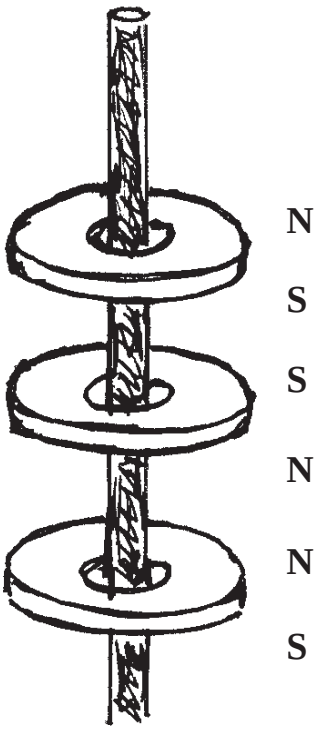
1. Slip rod in hole in base.
2. Attach rod with hex nut.
3. Slip one magnet over the rod.
4. Slip a second magnet on top of the first. Does it contact the magnet below it? Why or why not?
5. Drop magnets on top of each other in such a way that each repels the magnet above and below. The magnets appear to "float."

This demonstrates that like poles attract and unlike poles repel. Since each disc is magnetized, it repels the disc above and below it. The discs therefore appear to "float" above each other.

Description :

This apparatus consists of a plastic base, metal rod, hardware to affix the rod to the base, and 4 strong ceramic disc magnets.

The disc magnets in this set are permanent magnets that have been magnetized along the axis. One flat side is a north pole, the other flat side a south pole.



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