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3. A magnet can attract some objects but not others. This is a characteristic that can be used to identify different kinds of materials.

4. Magnets are surrounded by an invisible magnetic field that can pass through permeable materials. Materials that do not allow the magnetic field to pass through are called nonpermeable.

5. A compass is a tool used to detect magnetic fields. Magnetic fields can also be detected using iron filings.

6. The Earth is a giant magnet with a North Pole and a South Pole. A magnetic field surrounds the Earth.

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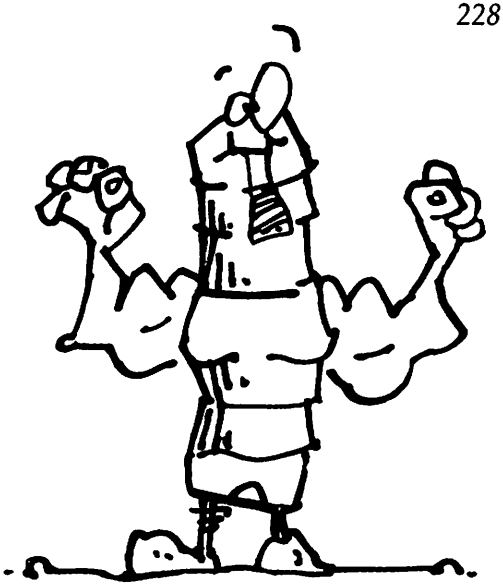
7. Some molecules have both positive and negative ends like the poles of a magnet and are called bipolar or diamagnetic. This characteristic allows these tiny, building blocks to behave like magnets. Water is an excellent example.

8. Magnets have a north pole and a south pole; like poles repel and opposite poles attract. Magnetic fields are stongest at the poles.

9. Magnets can also be created using electricity, and when electricity flows through a wire, it produces a detectable magnetic field.

10. Magnets can be used for technology, medicine, transportation, research, and entertainment.



Who Are You? And . . .

First of all, we may have an emergency at hand and we'll both want to cut to the chase and get the patient into the cardiac unit if necessary. So, before we go too much further, **define yourself**. Please check one and only one choice listed below and then immediately follow the directions that follow *in italics*. Thank you in advance for your cooperation.

I am holding this book because. . .

___ **A. I am a responsible, but panicked, parent.** My son/daughter/triplets (circle one) just informed me that his/her/their science fair project is due tomorrow. This is the only therapy I could afford on such short notice. Which means that if I was not holding this book, my hands would be encircling the soon-to-be-worm-bait's neck.

Directions: Can't say this is the first or the last time we heard that one. Hang in there, we can do this.

1. Quickly read the Table of Contents with the worm bait. The Big Ideas define what each section is about. Obviously, the kid is not passionate about science, or you would not be in this situation. See if you can find an idea that causes some portion of an eyelid or facial muscle to twitch.

If that does not work, we recommend narrowing the list to the following labs because they are fast, use materials that can be acquired with limited notice, and the intrinsic level of interest is generally quite high.