MagLab Summer Exploration Series
Week 3 Links

Hey everyone! These are the MagLab links to help you understand electromagnetism.

The discovery that started it all, here's How Oersted Discovered Electromagnetism, and a chance for you to play online with Oersted’s Compass. Here are a couple of deeper explanations of a Magnetic Field Around a Wire, and Magnetic Field Around a Wire II.

Electromagnetism is the force that allows the MagLab to build some of the strongest magnets in the world. Let’s take a moment to get a Magnet Primer, and then take a virtual tour of the World’s Strongest Continuous Field Magnet.

The discovery of electromagnetism led to a number of inventions. Take a look at How the Electromotive Forces Work, and the physics principles that help us remember the forces, the Right Hand and Left Hand Rules.

Discovering these forces was important in the invention of the electric motor, among many others. Take a look at How DC Motors Work.

While we use these motors every day, we can also talk about a machine that uses these forces but is less of an everyday machine, the MagLab’s Quarter Shrinking Machine.

Finally, MagLab user and researcher Thomas Szkopek talks about cool two-dimensional materials and what he learns about them in high magnetic fields. in this Take 2 video.

For some advanced fun, learn about Giant Magnetoresistance, an interesting little phenomenon that makes your iPods and computer hard drive possible.

Any questions? Email Carlos R. Villa.