

MAGNETISM STUDY GUIDE

- Many objects in space are magnetic. The sun, Earth, and Mars also have magnetic properties.
- What flows through a wire if you hook a copper wire to a battery?
Answer: electrons
- Did you know that if you wrapped thousands of coils of wire around a big piece of iron, you can make a very strong magnet that can pick up cars and huge machines!
- When two like poles are brought together a magnet repels.
- An electromagnet has an advantage over a permanent magnet because you can turn the electromagnet on and off which allows you to pick up objects and drop them once you have moved them.
- An electromagnet can be made stronger by adding more coils of copper wire, increasing the voltage, and also by adding an iron core.
- If you had a compass, iron filings, and iron objects you could detect a magnetic field.
- Electricity flowing through a wire is an example of energy being transferred from place to place.
- All of the following metals are attracted to a magnet: nickel, cobalt, and iron.
- Know the difference between a conductor and insulator. You learned this during our electricity unit.
- Be able to match the following words with their definitions:

Static electricity, friction, neutrons, attract, repel, electric charge, proton, electric force