Electromagnets – Fiction in the Facts

Print a set of these cards for each group of students.

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| For the magnet to work, the wire needs to be coiled in the same direction. | The magnetic property is caused by the battery. |
| All closed electrical circuits produce a magnetic field. | Magnetic fields in electrical circuits are created by a surplus of electrons in the wires. |
| Magnetic fields in electrical circuits are created by the directional flow of electrons. | The more times you wrap the wire, the greater the electromagnetic effect. |
| The thicker the wire used, the greater the electromagnetic effect. | The thicker the inside iron core, the greater the electromagnetic effect. |
| The magnetic force created by an electrical circuit is influenced by the direction of the current flow. | If wire is coiled without an iron core (the core is empty), the magnetic field is within the coil. |