**Test Date*:\_\_\_\_\_\_\_\_\_\_\_*** ***Name: \_\_\_\_\_\_\_\_\_\_\_***

***Science***

This makes a temporary magnet.

**Unit 4 Study Guide**

**Vocabulary**

Magnetic field—area around a magnet in which the force of the magnet acts

Electromagnet—a device in which a current of electricity is used. (battery, iron, & coiled wire makes one)

Magnet--An object that attracts iron and a few other metals

Poles—the place or end where a magnet is the strongest

Motor—A device that uses electricity to make things move

Bar Magnet—this type of magnet is a permanent magnet meaning it always has magnetic force

**Facts**

A compass has a magnetic needle and it is attracted to the Earth’s North Pole or magnetic field.

Magnets do not have to touch an object to attract to it.

If a piece of paper is used as a barrier between the magnet and the object (ex paper clips), the magnet will still attract the objects—but there will be less of them attracted.

Magnetic:

* Iron filings
* Refrigerator
* Lockers

Nonmagnetic:

* Aluminum can
* penny
* clay

Short Answer:

By looking at two bar magnets, be able to decide which pair will attract or repel—and explain your answer

Design an experiment on how you can get a magnetic car to move using another magnetic car.