**MY SCIENCE FAIR TOPIC IS WHAT THINGS ARE ATTRACTED TO MAGNETS. THIS IS WHAT I WROTE IN MY DAILY LOG (COMPOSITION NOTEBOOK) WHILE DOING MY RESEARCH IN TECHNOLOGY CLASS**

**Notice that I included all the information I will need to make my bibliography. I also wrote all the facts that I think I *might* want to include in my paper. It’s OK if I don’t use everything I write here. If I write information word-for-word, I put quotation marks around it.**

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Author: Chris Woodford

Title of website: *Explain That Stuff!*

Title of article: “Magnetism”

Date: September 26, 2018

Address: <https://www.explainthatstuff.com/magnetism.html>

Notes:

* people have been using magnets as compasses for thousands of years; Greeks, Romans, & Chinese
* must have seemed like magic to ancient people
* a magnet has a north pole & a south pole
* like poles repel, unlike poles attract
* magnetic field—invisible field of magnetism around the magnet
* Earth behaves like a large magnet so a magnet points to the north pole
* If you cut a bar magnet in half, you get 2 magnets, each with 2 poles
* magnetization—you can turn an iron nail into a magnet by running a magnet over it a few times
* magnets can “act at a distance,” attracting objects they aren’t touching
* magnets can penetrate through other objects like paper

Title of website: *Ducksters Education Site*

Title of article: “Physics for Kids: Magnetism”

Date: 2018

Address: <https://www.ducksters.com/science/magnetism.php>

Notes:

* opposites attract, like poles repel
* magnetic field caused when the electrons in the magnet’s molecules all spin in the same direction
* Iron is the main material used in magnets, & steel because it’s mostly iron.
* Spinning of the Earth’s iron core turns the Earth into a giant magnet.
* Earth’s magnetic field lets us navigate with magnets and lets birds and whales navigate during migration.
* Earth’s magnetic field protects us from Sun’s solar wind & radiation
* “By wrapping a wire around an iron bar and running current through the wire, very strong magnets can be created. This is called electromagnetism.” This can make an electric motor.

Title of website: *CoolKidFacts*

Title of article: “Magnets for Kids”

Date: 2018

Address: <https://www.coolkidfacts.com/magnetism-facts-for-kids/>

Notes:

* magnets can only pull things with iron in them
* magnets are usually made of iron or things like steel with lots of iron in them
* iron becomes magnetic when rubbed on something magnetic like lodestone because it makes all the electrons pull in the same direction
* each iron atom has 26 electrons
* ancient people thought magnets were magic
* “They are used in microwaves, electric fans, earphones, speakers, in medical equipment, electronics and in nearly all electric machines that use motor engines to make them work.”
* opposite poles attract each other, like poles push each other away
* cutting a magnet in half makes 2 magnets with 2 poles each
* Earth is a magnet because the iron core spins
* Compasses point toward the magnetic north pole, 620 miles south of the North Pole.