Magnet Structures 

Kindergarten Design Brief

**Background:** You’ve had some time to experiment with magnets to get a sense of what magnets can do and the kinds of things they can pick up. Your next task is to put what you know about magnets to use by building a structure held together only with magnets.

**Challenge:** Your challenge is to design and build the tallest freestanding structure you can. Everything in your structure must be held together only by the magnets provided.

**Criteria:** Your structure must:

* Use ONLY the materials provided and only those that are attracted by a magnet
* Stand by itself and be built UP from the table/desk
* Have a name

**Materials:**

* Set of magnets
* Magnetic and non-magnetic materials—for example--paperclips, lids of jars, soda pop tops, nuts, bolts, springs, allen wrenches, pipe cleaners, twist ties, keys, wire, plastic bits, etc.

**Tools:**

* Scissors
* Snap cubes or another non-standard unit for measuring the height of the structures

***Virginia Standards of Learning***

K.3 – Investigate and understand that magnets have an effect on some materials, make some things move without touching them, and have useful applications.

***Standards for Technological Literacy***

STL 9 – Understand engineering design.

STL 11 – Apply the design process.

Cindy Zmijewski Demers | cindy@upcyclecrc.org | UpCycle Creative Reuse Center | www.UpCycleCRC.org

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which objects were attracted to a magnet and which were not?

NO

YES

2. Draw a sketch of your sculpture and/or describe it here.

How tall was your sculpture? ­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What name did you give it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_