

# Cardinal Innovation Lab

**a.k.a...MakerSpace**



Welcome to the new attraction in the Necedah Middle School...

**The CARDINAL INNOVATION LAB.** It is an area where students can explore many different “passion projects” or projects they have always wanted to try, but never was allowed by the curriculum of other classes. Our Cardinal Innovation Lab was made possible through a generous donation from **Marquis Energy**. This is Necedah’s version of a **MakerSpace** area.

You might be asking yourself...What on Earth is a Makerspace?

**What is a Makerspace?** A Makerspace is an area or common media space that is reserved for creative exploration, engineering, tinkering, and inventing. Makerspaces incorporate engineering materials, crafting materials, technology, robotics, and more. The area can be used during whole class STEAM challenges, incorporated as a center or small group rotation, or accessed during unstructured creative time with STEAM Bins or Maker Mats. Classes may choose to limit materials or assign specific tasks or “Challenges” to students. Students may also be allowed time for more free range exploration and inventing. The possibilities are endless!

**Why a Makerspace?** The purpose of a Makerspace is to tap into as many different interests, passions, and strengths in our students as possible. As educators, we are tasked with the most important job in the world...Creating the next generation of problem solvers, innovators, and earth-shakers. In a Makerspace, children have opportunities to discover, assemble, construct, test, and explore using divergent, “outside the box” thinking. Through creative exploration and purposeful play, students become critical thinkers and inventors while collaborating with their peers.

**What is in a Makerspace?** We have purchased many different items for students to explore many different concepts. Some examples are LEGO Mindstorms (used for coding), Little Bits (circuits), 3D Scribbler pens for creating 3D art, and Raspberry Pi (used for students to learn computer programming and coding) just to name a few. We are always looking for items that can be added to the MakerSpace. Many of the items students use are consumables, such as glue sticks, cardboard, paint, hot glue sticks, etc. Any donations that you would like to make to the MakerSpace would be greatly appreciated. On the back of this sheet is a list of possibilities for donations.

Thanks for taking the time to visit our CARDINAL INNOVATION LAB.

Donations for the **CARDINAL INNOVATION LAB**. This is Necedah's version of a **MakerSpace** area.

- Rolls of masking tape, scotch tape, and duck tape
- Boxes of uncooked spaghetti noodles (thicker spaghetti noodles)
- Plastic cups- all sizes
- Coffee filters
- Q-Tips
- Eye droppers
- Vinegar
- Baking soda
- Ping pong balls
- Play dough
- Marshmallows
- Plastic silverware
- Cotton balls
- Felt
- Small, rubber bouncy balls
- Pipe cleaners
- Cardboard tubes (toilet paper and paper towel tubes)
- Poster board
- Empty and clean cardboard containers
- Rolls of aluminum foil, saran wrap, and wax paper
- Match box cars (to keep)
- Small action figures (to keep)
- Flexi straws
- Toothpicks
- Marbles
- Paint sticks
- Milk jug and/or water bottle caps
- Large Ziplock bags (2 or 3 gallon sized)
- String: yarn, twine, fishing line
- Small pebbles or rocks
- Rubber bands
- Metal washers in various sizes
- Egg cartons
- Popsicle sticks—large and small
- Cardboard
- Wood scraps (generally smaller pieces)
- Dowels
- Styrofoam
- Zip ties
- PVC pipe (generally smaller pieces)
- Wire

Other Very Useful Donations Include:

- Legos
- K'nex
- Marble runs
- Wooden blocks
- Flashlights
- Clear plastic bins