6th Grade Intro to Gateway Lesson: April 8

Learning Target:

Modeling, testing, evaluating, and modifying are used to transform ideas into practical solutions.

Warm-Ups:

View link: The Cup Board Pro

View Link: Review of the Design Process

Lesson Introduction/Background Information:

We learned that design is a process, that involves lots of trying and re-trying different steps as a part of that process. This week, you are going to be designing some solutions to problems using materials you find around your house.

Materials for today:
A variety of kitchen tools

Practice:

Look at some of the tools that you found in your kitchen, like this one for example:



How do the kitchen devices that you found work? On a piece of paper, describe how you think they work to achieve their end purpose. You can add diagrams of the smaller parts if you want.

Practice:

Once you've looked at some of the existing inventions that someone else created, how could you innovate, or improve, that invention?

The example in the warm-up with the Cup Board is an innovation on an existing invention, a cutting board. The designer saw a problem and designed something to solve that problem.

Pick one of the kitchen items that you've examined and design on paper at least one innovation for that item.

Self-Assessment:

What do you still wonder about kitchen tools? Were there any that you couldn't figure out?

Show your ideas for innovation to a family member, and add to your technical drawing if they have questions that aren't answered already in your sketch.

Extend Your Learning/Continued Practice:

The family that brought the Cup Board to the market did it on a show you may have watched called "Shark Tank". Watch them below, and then design your own "Shark Tank" pitch for one of your innovations that you came up with and present it to your family.

"Shark Tank" Pitch