

Wacky

Widgets

Engineering

Lesson Description

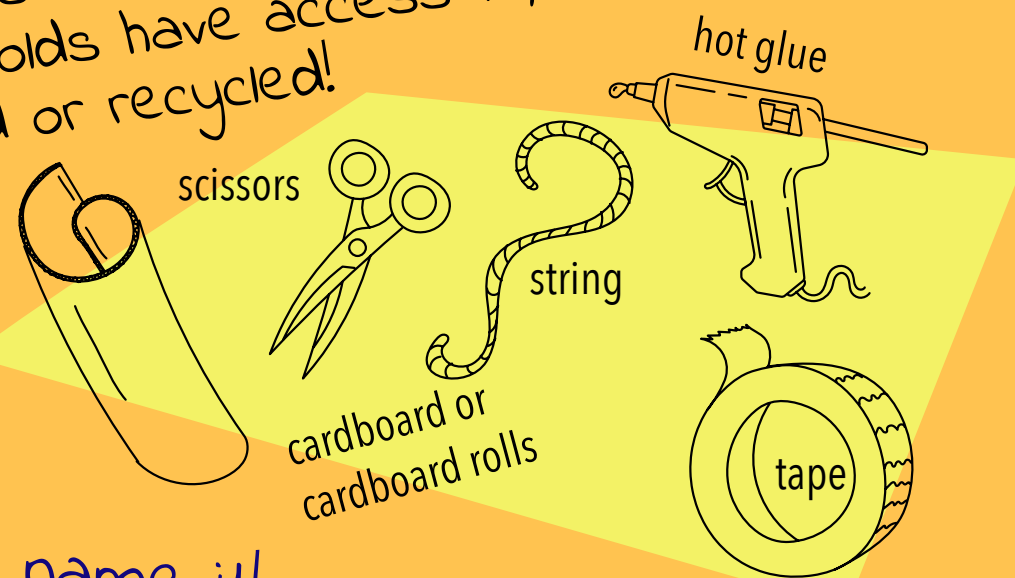
Turning a small everyday task such as cutting a piece of paper with scissors, or turning the kettle on, is turned into something truly captivating by fusing classic engineering exercises with a Mind Lab twist. The beauty of this lesson, is that you can design a machine to complete whatever task you want as simply or as silly as you want it to be.

Resources Needed

The best part about this lesson is that you can use just about

ANYTHING to create a wacky widget!

Materials that most schools and households have access to, and can be reused or recycled!



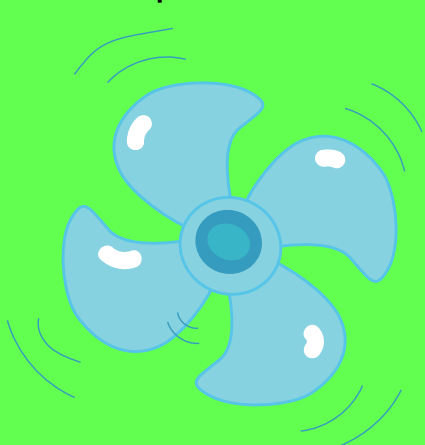
You name it!

To make your Wacky Widget even more unique, you can use random items like..



umbrellas, books, balls, tea kettles, clocks...

To turn your machine into something truly wacky, you will need electronic components like...



- ✓ LEDs
- ✓ Button batteries
- ✓ propellers
- ✓ DC motors
- ✓ Battery packs...

(or anything else that will help make your wacky widget even wilder!)

Lesson Outcomes

Collaboration

Problem Solving

Design process and carrying out a design

Mechanical engineering (simple machines)

Electronic Engineering (simple circuits)

EFFICIENCY IN PRODUCT DESIGN

Creativity (art)

Step 1

Identify a simple, everyday task that needs to be completed. For example: ring a bell, press the power button on a computer, switch a light off, send a text, put a hat on your head, you name it!

Step 2

Work together to come up with different mechanical and electrical components your team would like to include in your Wacky Widget and what materials you will need to go forward with your ideas.

Step 3

Build your Wacky Widget!