



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences --particularly students of color and girls -- by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

Become an engineer and find solutions to problems. Can you make three different creations from cardboard, tape, scissors, and glue?



Supplies Required:

- Cardboard
- Scissors
- Tape
- Glue
- Paper
- Something to draw with (pencils, pens, markers, etc.)

Video

Watch this video of a kid named Caine who created his own arcade with games and prizes entirely out of cardboard. <https://vimeo.com/40000072>

Overview

Engineers are people who find solutions to problems and create things that help other people or make life more fun. In this activity, you are challenged to build three creations from cardboard. Your creations can be anything from a fun toy, a pencil holder, a dog food dispenser, or something else entirely. Think of as many ideas as you can and then build it out of cardboard!

Instructions

1. Gather recycled cardboard. Think cereal boxes, toilet paper tubes, paper towel tubes, shoe boxes, pizza boxes, etc.
2. Think of a problem that you or someone you know may have. For example, is your closet messy? Do you forget where you put something?
3. Choose a problem that you want to solve. On a piece of paper, draw you ideas for how you can solve this problem. This is your design! Engineers create a design before they start building to help them rememeber their ideas.
4. Start building your creation! If you run into a problem, how can you change your design to fix it?
5. Test your creation. Does it work as well as you imagined? Share your creation with others and ask what they think.
6. What is something that you can change about your creation to make it better? Build it with cardboard!

Additional Resources

1. Want to build more with cardboard, check out these Dyson Challenge cards to see some more cool things you can build with cardboard! <https://www.jamesdysonfoundation.com/resources/challenge-cards.html>

Share It Out

Share on social media: Record a video or take a picture of your activity and post the results online using the hashtags:

#CardboardChallenge
#CardboardCreation
#ProjectExploration
#StemAtHome

Tag a friend and challenge them to do it, too!

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634



www.projectexploration.org