

Cookie Packaging Design Challenge

Techbridge Girls is committed to supporting our community by providing access to high-quality at-home STEM activities for our girls and curating resources for families and educators. The below activity was designed to empower girls to lead fearlessly by learning and teaching others while sheltering in place.

Ever wonder how items like eggs or cell phones stay protected while being shipped from place to place? Let's use our engineering skills to build an innovative package for cookies that protects them from breaking!

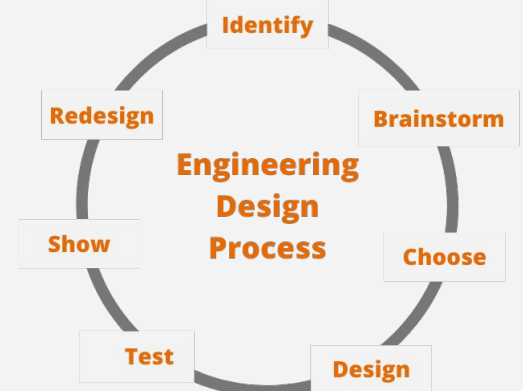
1 Get your materials.

Source materials around the house, such as newspaper or recycled paper, cardboard, tape, plastic bags, foil, etc. Make sure you have one cookie or graham cracker ready to pack!

2 Build your design.

Design your cookie package using the Engineering Design Process.

You've already identified the problem--the cookie shouldn't break--so now begin brainstorming (drawing!) your design. For inspiration, check out packaging for other products like food, cleaning supplies, and toiletries.



After building your device, test it by placing a cookie inside the device and dropping it from different heights. Make sure to record all of your observations. How high can you drop it without the cookie breaking? What ways can you change your design to make it better?

ASK: Where do you see packages in your everyday life? What would happen if we did not have packages for the products we use? What materials and design elements worked best for your cookie packaging? What step of the Engineering Design Process is most challenging for you?

3 Share!

With permission from your parents or guardians, please post a photo of your completed project on Facebook, Twitter, or Instagram, and tag @techbridgegirls so we can see your great work!

CAREER CONNECTION: Package Engineers research, design, and manufacture packaging for common products like cosmetics, electronics, food, and toys. They make sure packages are designed to both protect and sell products. Average starting salaries are on average \$65,000- \$90,000.

We are proud to support our girls' STEM journeys by providing resources to overcome barriers and to thrive and lead in STEM.