

Recycled Materials 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.

Design a useful object using recycled materials! Categories for useful objects can include: wearable objects, musical instruments, kitchen tools, school supplies, or useful objects for a bedroom.

1 Get your materials.

Source materials around the house, such plastic water bottles, milk jugs, paper towel rolls, toilet paper rolls, paper, cereal boxes, cardboard, string, tape.

2 Build your design.

Use recycled materials to create something entirely new! First, pick what category you think would be most helpful (or fun!) for your new design. Then, brainstorm what the design could look like and what materials you would use. Choose one design, and begin building!

You can take this activity one step further by interviewing your family members. Is there a device that could be helpful for them? Share with them the categories listed above.

ASK: Why is reusing materials important for our earth? What are objects we can reuse instead of throwing them away? What is your favorite part about combining creativity with STEM concepts?



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: Environmental engineers use their science and engineering knowledge to solve problems in and for the environment. Average starting salaries of environmental engineers are about \$61,000, and average salaries after 5 years are about \$83,000.

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