RULES

One person's trash is another person’s treasure. It’s time to take that old cardboard box and upcycle it into something different.

Device Assembly

Steps 1 and 2: assemble and verify

Steps 3 and 4: change and verify

Starting Envelope

Minimum starting envelope

Maximum starting envelope

All your cardboard pieces need to fit in the starting envelope. You can only use pieces in the starting envelope for assembly.

Grade Differentiators

Grades 4-6: **50%** of pieces used in second device

Grades 7-8: **75%** of pieces used in second device

High school: **100%** of pieces used in second device

Materials

For construction: cardboard and glue

For assembly: pieces from your starting envelope

No tape or other fasteners/materials

Don’t forget to read the full rules at thetech.org/challenge.
2021 Tech Challenge Safety Guidelines

**DO**

**Wear protection**
Wear appropriate safety gear for the task such as ANSI-approved eye protection.

**Listen and be alert**
Pay attention and follow the judges' directions.

**Have a Safety Officer**
Identify one student to oversee safe design and implementation.

**Health and safety**
Make sure you’re being safe as you work on your project. Follow all public health guidelines for your area.

**DON’T**

- No flammable liquids or gases
- No pressurized gases > 5 psi
- No animals
- No horseplay
- Don’t ignore safety labels
- No climbing

**Spirit of the Challenge**

The Tech Challenge emphasizes the importance of developing engineering solutions that would be practical in real life, otherwise known as the Spirit of the Challenge. For this challenge, teams should develop and document real-life solutions.

Store-bought solutions are prohibited and not in the Spirit of the Challenge. Teams are encouraged to design and build devices using their own ideas and creativity. Use of existing plans for reference and inspiration is allowed. All plans, and the source of those plans, must be documented in the team Engineering Journal.

**Engineering Journal**

- Submit one journal as a PDF
- Handwritten or typed/must be legible
- Keep a detailed record of all your teams’ activities
- Include problem statements and success criteria

Don’t forget to read the full rules at thetech.org/challenge.