



# Tower Power Challenge

Design, plan, and build a 12-inch paper tower that can support a can of food for 15 seconds.

## Materials

- Cardboard
- Toilet paper rolls
- Tape and/or glue
- Scissors
- Rulers
- Some type of string (optional)
- 1 can of food

## Design

- Draw a sketch of your tower.
  - Does it have support strings, a base or will it be free standing?
  - Will your tower be painted or decorated?

## Plan

- Determine what materials you'll use to build your tower.
- Find the location where you will test its strength.
- Gather your build materials. Make sure you have enough to build a 12-inch tower.

## Build

- Using any combination of cardboard, toilet paper rolls, tape, glue, scissors, and string, build a tower that is at least 12 inches tall. Use the ruler to measure it.
- When you are done building your tower, examine it.
  - Does it seem strong enough to support the weight of a can of food?
  - What can you do to make it feel even more sturdy?
- Place your tower in its test location.

## Test

- Place the can of food on the top of your tower and start counting!

## Did you make it to 15 seconds?

If your tower did not support the weight of the can for 15 seconds, try modifying the design. A few factors to consider when modifying your tower: tower height, thickness of the tower material and walls, surface conditions of the testing location.