

The Paper Tower Challenge

What is the tallest tower you can build with just 2 sheets of newspaper?



Paper Tower Directions

Materials:

- ✓ Two sheets of newspaper (per group)
- ✓ Rulers

Directions:

- ✓ **BUILD** the tallest tower you can. You can bend, tear, crumple, or roll the newspaper.
- ✓ Try to make the tower **TALLER**. Keep **REDESIGNING** it until you can't go any higher.
- ✓ Use a ruler to **measure the height** of your tower. It must stand for at least **30 seconds** without falling over.

Goal:

Students will construct the tallest tower they can with just 2 sheets of newspaper.

Student Lab Sheet

Were you successful in this challenge? Why or why not?

What was the most difficult part of this challenge? Why?

How did you come up with your final idea for this challenge? Did you make modifications to your original idea? Why or why not?

Did you succeed in making your tower as tall as possible that could stand for at least 30 seconds without falling over? Why or why not?

How can you make a weak material like newspaper strong enough to stand up?

The DESIGN Process



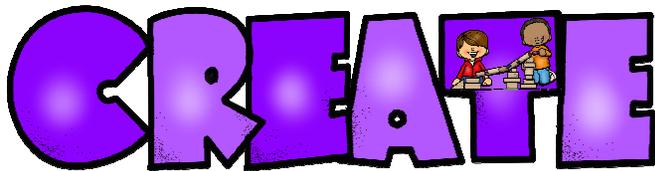
What are some problems you might encounter with this challenge? What are your constraints?



What are some possible solutions? Brainstorm a list of ideas and chose the best one.



Draw a diagram on a separate sheet of paper and make a list of the steps you will take.



Follow your plan to build your paper tower. Test and revise as needed.



What worked and what didn't work? How did you have to modify your design to make it better?

Extension Activities :

How can you make your tower even taller? What happens if you add 8 in. of tape?

What happens if you use books as a foundation to support the bottom of the structure?

What happens if you use a different type of paper, like tissue paper, copier paper, or cardboard?

Choose one thing to change (variable), make a prediction, and test it. What were the results?