



DESIGN CHALLENGE

What You'll Need

- 1 sheet of newspaper
- 12" of tape

Quote



Explain the quote listed in your own words, and then describe how it applies to the design challenge.

"Success is a collection of problems solved."

- I.M. Pei

Tallest Tower

Build the tallest, free-standing tower with newspaper. (Free-standing means that the newspaper cannot be taped onto any surface or wedged between surfaces.) Optional time limit: 10 minutes.



Reflection Questions:

With only having one sheet of newspaper, how did you come up with your tower strategy?

What did you know about a structure/tower that helped you with this challenge?



Redesign Challenge:

Build the strongest, free-standing tower that supports at least one textbook six inches above the table for at least three seconds. Optional time limit: 20 minutes.

- 5 sheets of newspaper
- 24" of tape



Overall Design Reflection Questions:

- What were some interesting discoveries you made while working on the Design Challenges?
 - About the problems? About yourself?
- What were some of the difficulties of the Design Challenges?
 - What made them difficult?
- What were some learning moments?
 - What made them so?
- How can you use what you have learned in the future?

For more on design and flight, check out – To Our Solar System and Back Digital Exploration on TGR EDU: Explore tgreduexplore.org/curriculum