

Paper Skyscraper

Who says all the fun has to happen at The Tech Interactive? This DIY engineering activity can be done with inexpensive store-bought supplies and things you find around the house!

Your Challenge

Create the tallest structure you can with five sheets of paper and one foot of tape in 15 minutes or less. It must stand up on its own!

Materials

- Five sheets of printer paper (letter size or A4)
- · One foot of masking tape
- Measuring tape or ruler
- Scissors (optional)





Mix it Up!

Make do with what you have around the house. Reuse paper that's already been printed on. No printer paper? Old magazines might work! No masking tape? Sub in some clear tape or painter's tape, or get creative with other ways to hold things together, like with rubber bands and paperclips.

Get Silly!

Have some fun with these additional challenges themed around protecting your TP stash!



- Create the tallest structure you can that can hold up a roll of toilet paper.*
- · How many rolls of toilet paper can your structure hold?
- · Start fresh and take an artistic spin. Create a sculpture to hold your toilet paper!
- *Please leave the toilet paper rolled up! We don't want to waste our precious resources!

Explore More

Continue building off your original idea, or change it up with these variations.

- Iterate! Experiment! Use what you've learned so far to make a new structure with fresh materials.
- Do more with less! Can you reach the same goals using less paper or tape?
- Speed round! Do the challenge (or any variation of it) in 5 minutes or less!
- Build for the ages! Forget the 15 minute time limit, and see where your imagination and ingenuity lead you.
- What other variations can you think of?



Subject:

Engineering Design Thinking

Age:

6+

Time:

15+ minutes

Key concepts:

Civil engineering, weight, structure, stability, design, test, iterate, build

