

Your task is to design and make a paper table using only paper and tape. This paper table must be able to hold objects at least one foot off the ground.

Step One: Get inspired!

Before engineers start drawing and building, they often research their ideas. Research can include reading about what you want to build or finding inspiration from places and objects that are around you. Look at the tables around you. You will probably notice that tables come in different shapes and sizes.

As you look at the tables, consider the following questions:

- What materials are tables made out of?
- What similarities can you find in the way tables are designed?
- Which designs do you like?

Step Two: Select your Materials

Materials you can use for this challenge are: tape and paper of any kind. Remember to **ONLY** use these materials - it is part of the fun!

You may also need:

- scissors if you need to cut the paper or tape
- a ruler to measure the height of your table

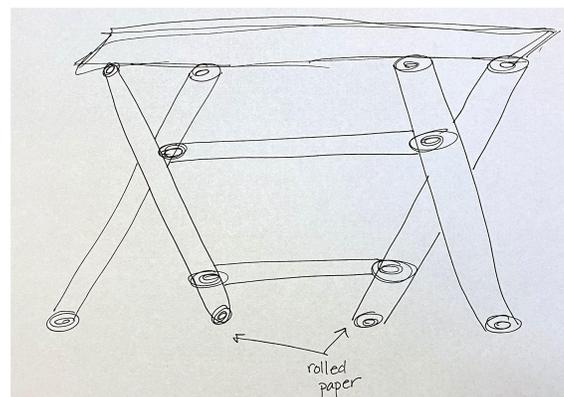
As you are thinking about the paper you are going to use, think about how you might fold, roll or bend it to help transform the paper into different shapes.

Step Three: Designing your Paper Table

Like an engineer, start your paper table project with a drawing of your design! Engineers draw out their ideas (sometimes called schematics, blueprints, sketches) as part of their design process.

Remember to keep the materials you found in mind as you draw your designs.

Drawing and talking through your ideas will help you finalize your plans.



Step Four: Building your Paper Table

Start building your table! Even if your paper table doesn't work right away, keep at it!

If you need help...

- Consider working with those around you!
- Think about additional or different materials you can use.
- Take a short break and give yourself time to refresh!



Extra Challenges

If you succeeded in building your design, next try one of these

- **Make it stronger:** How many books can your table hold? Last year, one student got her table to hold 46 books! Can you beat her record?
- **Make it taller:** How tall can you make your table and still have it hold at least one book?

If you liked this challenge, click the link below to find out more!

[How It's Made: Table Tennis Table \(video - first 6 minutes\)](#)

Step 5: Sharing your Paper Table on Instagram or email.

We want to see your paper table! With permission from your parent, or guardian, share a picture of your paper table for our instagram page. By direct messaging or emailing an image of your challenge, you are giving us written consent to redistribute the image on our official instagram page and [webpage](#).

- **Instagram:** @sciencecircuswhittier
- **Email:** sciencecircuswhittier@gmail.com

