



USE YOUR BRAIN

ENGINEERING CHALLENGE



Building Blocks?

WHAT SHAPE MAKES THE BEST BLOCK AND WHAT CAN YOU MAKE?

The Challenge

Blocks are one of the first toys many kids play with. Whether they are tough wooden blocks or soft foam blocks, most architects and construction workers started by stacking.

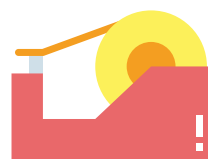
But what if you didn't have any blocks? Could you make your own? Keep your Lego in the closet, this is a DIY project!

Materials

- A bunch of paper. Whatever paper you have is fine. Thicker paper is stronger. Colorful paper looks nice. You can color or make patterns on your paper if you like!
- Scissors if you need to cut your paper.
- Tape to strengthen your blocks.



What to Do



In order to make your blocks, you are going to need to fold. Your blocks don't need to be closed on all sides. Indeed, you'll find it easier to fold them if you leave two sides open, they'll still be strong enough. Check the picture above!

Your first major decision is to pick a shape. What will work best. Round? Square? Triangle? Something else? A mixture?

Next you need to decide how big they should be. Smaller blocks will be more stable, but will take more work to cut, fold, and tape.

You also should consider how thick your blocks should be. The type of paper might matter here. Thin paper may work better with multiple layers.

Once you have your design, it's time to start building! Test your design in multiple ways. How high can you go? How much weight can it hold? Do you think another design would work better?