



Use recycled materials to build a sustainable city!

Description:

Put on your engineering hat and practice Reusing materials in this building challenge! Engineers are challenged all the time to create buildings with new types of materials. Today, you are going to use materials you find in your household recycling to create a building. If you work with a sibling, or get excited, you could create a whole sustainable city!

Materials:

- Any recycling that might be in your house: egg cartons, milk jugs, empty boxes, plastic containers, old plastic bags, etc...
- Pencil and paper
- Tape or string
- Scissors

Ready, Set, Build!!

1. Collect the recycling you want to use for your project in one area – make sure you check with a grown-up where it's okay to build in your house!
2. Looking at what you have, sketch out a design for your building. Think about what kind of building you want to create and try to think of ways that the building could be more environmentally friendly. Maybe a school with a garden on the roof? How about a fire station with solar panels on the walls?
3. Use your materials to construct the building you designed.
4. Evaluate your design: How did your project come out? What are you proud of? Any things that you would change about your design? What materials worked the way you thought they would? What ended up working out differently? What was the strongest material you worked with? What was the most flexible material you found?
5. Try again. Taking what you learned in creating your first building, start to design another building to be part of your sustainable city!