STRUCTURAL ENGINEERING

STRUCTURAL ACTIVITY

Block house building

Materials

- Lego or building blocks (Duplo, Jenga, etc)

Instructions

The aim of this activity is to build the strongest house out of building blocks.

The house must be big enough to fit Lego people inside, and have a point of entry.

The houses need to have at least a set of four walls and a roof.

It is a good idea to spend some time sketching and brainstorming design ideas on paper.

Each group will present their house and share their ideas. How did they make their walls strong? How much lego did they use? Did they add any creative decorations?

The house designs can be tested to see if they can withstand a little pressure.

- Earthquake proof: Place the house on a piece of paper and shake shift the paper back and forth.
- Wall strength: Try to push over the walls with a pencil or lean a ruler again the walls.
- Roof strength: Place an object on the roof to see if the structure can withstand snow fall or heavy rain.

After this has done to each house, there should be a discussion on why some houses were stronger than others, what was successful and how to improve them.

? For more information on why blocks can be good for learning about structural engineering, visit the Science section of How Stuff Works website (howstuffworks.com) or click here!

ACTIVITY