



2nd and Third Grade Bubble Blower



The Problem:

Your 3 year old cousin is coming over and you are going to babysit. Blowing bubbles would be a great way to keep her attention. It's also her favorite thing to do. You need to create a bubble wand to help your cousin stay entertained.

The Challenge:

You are going to design and create a bubble wand that will make many bubbles of various sizes. It will need to have structural integrity and be able to create bubbles with the shape you have chosen.

Criteria and Constraints:

- #1-Your 2-D blueprint design must contain labels and measurements
- #2-Your bubble wand must have structural integrity
- #3-The **total length** of the entire bubble wand (top to bottom including handle) must be no longer than **5 inches** long
- #4-The total **width** of the **handle** must be no wider than **1 inch wide**
- #5-The total **width** of the **blower** part must be no wider than **4 inches**
- #6-The total **thickness** (depth) must not be more than **1 inch**
- #7-You will create your 3-D robot using Tinkercad

Steps to Follow:

- #1-Create a 2-D blueprint of your bubble blower on grid paper.
 - A-Label the parts
 - handle
 - blower
 - B-Put in the dimensions of each part mentioned above
 - length of handle
 - width of handle
 - thickness of handle
 - length of blower
 - width of blower (at widest spot)
 - depth of blower
 - Total length (handle and blower together)
- #2-Get the blueprint approved by Mrs. Spraggins
- #4-Create your bubble wand using Tinkercad
 - "Create New Design"
 - make sure your dimensions match your blueprint (click on "**settings**" and change "**units**" to "**inches**") (Custom **length** "**6.0**" and **width** "**6.0**")
- #5-Save your design to Google Drive
 - First Name, Last Initial-teacher
 - "Sandie, S-Spraggins"
- #6-Share with Mrs. Spraggins