Title:

Engineering Challenge

July 20, 2022

Problem Statement: Write the problem statement in your own words and interpretation. What are you trying to achieve? What is being learned through this challenge?

We are to build a contraption made out of wooden sticks and rubber bands attached to a meter stick designed to hold a water balloon in order to transport it the fastest without it popping.

Materials: List the materials given (if any).

Meter Stick
Wooden Sticks
Rubber Bands
Tape
Water Balloon

Approach: Write a description of your plan to achieve the goal of the problem statement. Add drawings/sketches/CADs if possible.

We wanted either a triangle or square frame with vertical sticks at intervals to contain the balloon.

Solution: What is your solution to the given problem?

We made a square pattern with a rubber band base. Three vertical and diagonal sticks were placed around the edge of the base. An extra part was made to hold the end of the balloon.

Analysis: After testing, did it achieve your goal? Either way, what could you have done better? If given more time/materials, what would you do differently?

We didn't achieve the goal effectively as the balloon fell a few times and popped once. The extra part was tapped over and was made pointless, making the balloon fall. If that part was not tapped over we should have had one of the best contraption designs as it would be impossible to fall or swing too much.

Images:


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