Tech Day 2023

## Bomb Squad

## Eligibility

Three (3) teams of 2 members per chapter may participate.

## Story

The bomb squad needs your help! Grab the bomb and move it away for safe disposal! Teams will have 2.5 hours to build.

## Overview

Using a syringe arm, grab the pvc pipe and move it over the 3 " high barrier without triggering the mouse trap.

## Materials

- 8 plastic syringes (any size but you may use these links)

Amazon.com: 30 Pack 20mL Syringes, Plastic Syringes with Catheter Tip and Cap, Individually Sealed Feeding Syringe For Dogs, Measuring Syringe For Liquid, Scientific Labs, Refilling, Dispensing: Industrial \& Scientific

- Vinyl tubing to fit syringes (any size but you may use these links)

Amazon.com: 10 Feet - 3/16" ID 7/16" OD Clear Vinyl Tubing Food Grade Multipurpose Tube for Beer Line, Kegerator, Wine Making, Airline Tubing for Aquarium, Air Water Hose, Fuel Line by Proper Pour : Industrial \& Scientific

- Cardboard/foam board
- Index cards
- Scissors
- Hot glue gun \& glue sticks

Time limit
60 seconds

## Start

Grab the PVC pipe with the syringe arm on side A (left) and wait for the coordinator to give you the signal to start.

1. Point 1: Move the PVC pipe over the barrier to side B. Release the PVC pipe and move the syringe arm back over the barrier to side $A$ and rest it on the surface. Confirm with the judge that a point has been scored.
2. Points 2+: Use the syringe arm to move the PVC pipe back to side A. Point is not scored until the empty syringe arm is moved to side $B$ and is resting on the surface. Confirm with the judge that another point has been scored. Continue the pattern to score additional points until time runs out.

## Points

1. 1 Bonus point is given for each consecutive point scored without snapping the mousetrap. For example, if 3 points are scored successfully without snapping the mousetrap, then the team earns 3 bonus points for a total of 6 .
2. If a team scores 3 points but snaps the mousetrap between points, then they do not earn any bonus points and will have a team score of 3 .
3. Time of last point scored will be noted to help break ties. Fastest team wins the tiebreaker.

## Penalties

If the mousetrap snaps, gameplay stops and the judge will reset the game from the beginning. Time is paused while the game is reset.

## Dimensions

A standard mouse trap will be used but may change based on availability. The PVC pipe is 6 inches long and has a 1.25 inch diameter. The barrier is approximately 3 inches tall and up to 1.75 inches wide.

## Images:



PVC pipe and mouse trap:


PVC pipe on side $A$ of the barrier.


PVC pipe on side B of the barrier.

