PING PONG BALL CATAPULT

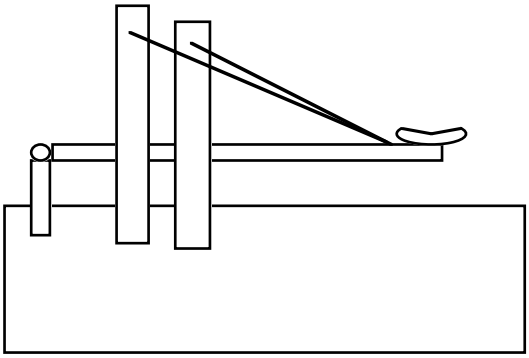
DESCRIPTION:

A team of two students will design and construct a catapult device to shoot a ping pong ball at a target with a given range with a ceiling height limitation of 12 feet.

NUMBER OF PARTICIPANTS: 2 APPROXIMATE TIME: 30 minutes

THE COMPETITION:

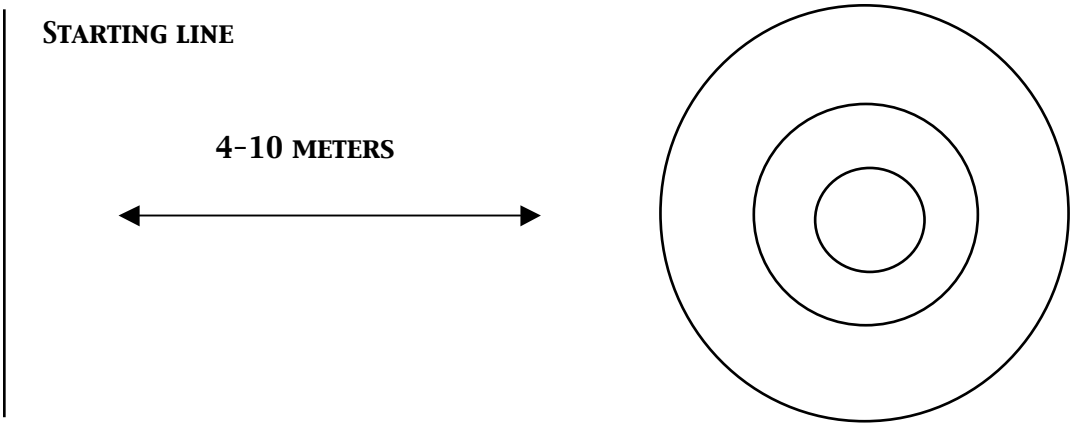
1. Students are to design, construct, and bring to the competition a catapult device similar to (but not limited to) the sample below. Rubber bands, springs, or any other springy material will be permitted.



2. Catapults are not limited to the above design and may be of any size and material with as few or as many positions as needed to hit a target.

3 Evidence should be collected and presented on a data table which includes base positions, shooting arm positions, and the distances traveled.

4. Targets will be three concentric rings placed between four and ten meters from the starting point.



5. Contestants will shoot three ping pong balls from each of three different distances to be announced by the judge just prior to the competition. (Students - Parents are not allowed to handle the catapult once the competition has begun.)

SCORING:

1. Each shot will be awarded points according to where the ping pong ball first hits, not after a roll or bounce. If a ball lands on a line, the contestant will receive the greater of the possible points.
   - 5 points for the inner-most circle
   - 3 points for the middle circle
   - 1 points for the outer-most circle

2. The team with the most points wins the competition.

3. In the case of a tie, the contestants will each shoot three ping pong balls from new distances until a winner is declared.

THIS IS A NOTE TO PARENTS THAT JOE SALAMONY USES:

THE SCIENCE OLYMPIAD STAFF UNDERSTANDS AND ENCOURAGES YOUR ASSISTANCE WITH CERTAIN SAFETY ASPECTS OF THIS ACTIVITY (USING TOOLS, CONSTRUCTING, ETC.) HOWEVER, IN ORDER TO ENSURE FAIRNESS FOR ALL OF THE STUDENTS PARTICIPATING IN THE CATAPULT COMPETITION, PLEASE LET YOUR CHILD UTILIZE THEIR CREATIVITY AND SKILLS IN THIS ENDEAVOR. REMEMBER, YOU ARE ASSISTING YOUR CHILD WITH THEIR PROJECT, NOT VICE VERSA!