## High School Technology Problem Solving On-Site Challenge

## Challenge:

Using only the items listed below from the materials list, design and build a solution that will support a table tennis ball the greatest distance (in a horizontal line) over the edge of the table.

## Table Tennis Ball



## Materials:

Each team will receive a packet containing the following items:

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\begin{array}{ll}
\text { Ten (10) craft sticks } & \text { One (1) plastic solo drinking cup } \\
\text { Five (5) drinking straws } & \text { One (1) table tennis ball } \\
\text { Five (5) } 3 \text { " } \times 5^{"} \text { note cards } & \text { One (1) tennis ball } \\
\text { One (1) } 8.5^{\prime \prime} \times 11^{1 "} \text { color paper card stock } &
\end{array}
$$

Useable materials from the team tool box/container (can be a part of the solution):

- Masking tape
- Use only your toolbox, materials, and the provided supplies to build your solution. Any other items or tools cannot be part of your solution - only the materials listed above.
- You must wear proper eye protection and follow all other rules in the TSA Competitive Events Guide.
- The measurement will be the greatest distance over the edge of the table in a horizontal line. The entire solution must be above the horizontal plane of the top of the table.
- The entire solution must be supported on the color paper card stock while it's on the table surface.
- The outermost edge of the table tennis ball must be clearly visible for the measurement.
- The color paper card stock is the only portion on the solution that can touch the table surface.
- Tape cannot touch the table.
- The color card stock cannot be cut or altered in any way and must remain in the original shape.
- You are allowed to cut/break the craft sticks and the drinking straws.
- The solution can only make contact with the top surface of the color paper card stock.
- If any part of the solution (other than the bottom of the color paper card stock) touches the table surface, the distance will be recorded as 0 (zero) inches.
- The solution will be evaluated at the team table (workspace) while resting on the table surface.
- The time limit will be announced by the event coordinator.

