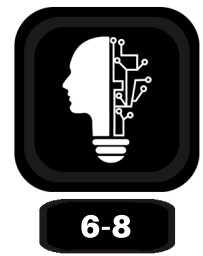


Popsicle Stick Chain Reaction



Materials:

- Popsicle Sticks
(Minimum 15-20 per chain)



Instructions:

1. Take two popsicle sticks and form a "X" on a flat surface with ample space. Either a floor or table will suffice. Take into consideration the desired length of the chain to be.
2. Lace an end of the third popsicle stick on the bottom "X" at the very beginning of the chain. Lay this piece over the top of the formed "X" diagonally. (Keep pressure on the center of the "X" made in Step # 1 either from a clamp or with the help of a partner.)
3. Repeat the previous step with a fourth popsicle stick but place it under the other end of the same stick used in Step # 2 inverted diagonally.
4. Continue to add the rest of the popsicle sticks in a similar manner as depicted until there are at least (15-20) popsicles arranged in a chain. Make sure you keep pressure on the center of the "X" as the chain is built out.
5. Once the chain length desired is achieved, let go and watch the popsicle sticks explode down the chain.

Possible Variations:

- Compete to see who can build the longest chain in a certain amount of time.
- Compare reactions of popsicle sticks of different physical attributes. (i.e., longer vs. shorter, thicker vs. thinner, etc.) Is there a visual difference in the reaction? Why or why not?



The Science:

The popsicle sticks naturally want to stay in current orientation. When the sticks are bent (not too much or they will break) there is potential energy stored within popsicle stick. Once the chain is released, the potential energy turns into kinetic energy and the popsicle sticks return to their original orientation.