



Challenger's Morning Science Segment:

January 30, 2017

Topic: Energy

Build: A Catapult

Credit:

http://www.connectamillionminds.com/assets/media/downloads/TWC-Studios_History-Catapults.pdf

Materials Needed:

6 Popsicle sticks / 4 rubber bands / marshmallows

Building catapults: Begin securing a stack of 4 popsicle sticks by twisting a rubber band around each end of the stack, and set aside. Next, take the remaining two sticks and twist a rubber band around one end. Stick your finger between the two sticks and separate into a "V" that can be inserted across the middle of the stack of 4. Push all the way into the stack as close to the narrow end of the "V" as possible. Wrap the remaining rubber band around the "V" and the stack with an "X" twist to secure them together. The catapult can be tested by firing mini marshmallows at a target, or by using any small object from around the house to fling.

The science [credit: [connectamillionminds.com/New York Hall of Science](http://www.connectamillionminds.com/New_York_Hall_of_Science)]:

A catapult uses a lever to amplify force and provide a mechanical advantage. When the lever of the catapult is pulled back, potential energy is created in the lever arm. Then once released, the potential energy is changed to kinetic energy and the firing object flies towards its target!

This activity ties into the Challenger Learning Center of Maine: Challenger holds STEM camps throughout the year for students entering grades K-8. Sign up today for our February Vacation camp with topics such as becoming a Martian, Minecraft and ... LEGOs! FMI- www.astronaut.org