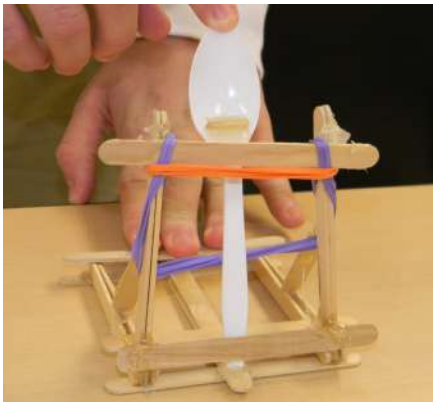
Projectile Motion
The Catapult Lab

Objective: To apply the laws of Physics and the equations for projectile motion to design a catapult that can accurately launch a marshmallow the farthest.

Materials and Methods:
In this lab you will be building marshmallow catapults. Your catapult will need to be able to launch a marshmallow in the range of 3-6 m. Your catapult must be able to launch a marshmallow at any angle between 0 and 90 degrees.

Use your chromebook and look up designs. Google "Craft stick catapult"

Possible material suggestions:
1) rubber bands
2) masking tape
3) duct tape
4) wood supports (tongue depressors/popsicle sticks)
5) hot glue



DATA TABLE:

t - Time of Flight (seconds) _____

X - Distance flown (meters) _____

Conclusion:

$Y= -.5(-9.8)t^2$

Solve for y

$x= v(t)$

Solve for v