

## Simple Catapult

## **Materials:**

- 9-11 craft sticks
- 4-6 rubber bands
- 1 plastic spoon

## **Instructions:**



**1.** Take 7-9 of the craft sticks and tie a rubber band around one end. Tie another rubber band around the opposite end so the sticks are bound together.



**2.** Take 2 sticks and tie a rubber band on one of the ends. Try to tie the band close to the edge of the sticks.



**3.** Insert the 2 sticks banded together through the stick bundle as shown.



**4.** Tie a rubber band in a cross fashion joining the two pieces. The closer the bundle gets to the edge, the more leverage the catapult will have.



**5.** Use a few rubber bands and attach the spoon.

Newton's first law of motion states that objects in motion tend to remain in motion, unless acted on by an outside force. When you pulled back and released the catapult, both the lever arm and the "ammunition" moved forward with energy from the rubber bands and the flexing of the craft sticks. When the lever arm came to a stop, the ammunition, however, remained in motion until it hit something else or until the force of gravity overcame its motion and brought it to the ground.

