

NEWTON'S CRADLE

Materials:

- “ Craft Sticks (18)
- “ (6) Marbles
- “ String – Six (6) 8” lengths
- “ Scissors
- “ Tape
- “ Ruler
- “ Pencil
- “ Hot Glue Gun/Super Glue

Instructions:

- “ Step 1 Cut string into (6) equal pieces approximately 8” long
- “ Step 2 Glue (4) craft sticks together at the corners to make a square. Repeat with (4) more crafts sticks. Let dry. These will be the sides of the frame.
- “ Step 3 Using hot glue, assemble the frame. Take the two sides and hot glue a craft stick perpendicular to each corner. The final frame will be a cube.
- “ Step 4 Make (6) marks along two craft sticks every $\frac{1}{2}$ ”. Make sure the marks are centered on the sticks.
- “ Step 5 Hot glue a marble to the center of one of the pieces of string. Repeat to end up with (6) separate marbles, each glued to the center of a string.
- “ Step 6 Glue sticks perpendicular to the tops of the squares so you form the base of your Newton's Cradle.
- “ Step 7 Glue one end of the strings with marbles attached along one of the craft sticks at each mark. Set aside.
- “ Step 8 Glue the craft stick with the taped string/marbles to one side of the frame.

“ Step 9 Glue the second marked craft stick to the opposite side of the frame.

“ Step 10 Tape the loose end of each string with a marble attached to the marked craft stick. Pull on the strings gently to make sure the marbles align. The marbles must line up both horizontally and when viewed from the top.

Pull one of the end marbles up and let go! Watch what happens!