

# TUBE-TAR



Bash The Trash builds, performs and educates with musical instruments made from reused and repurposed materials. They combine science, music and environmental awareness in performances, programs and social initiatives, reaching over 60,000 students a year in the New York City metro area, online, and nationwide through a network of regional performers. [www.bashthetrash.com](http://www.bashthetrash.com)

## YOU WILL NEED:

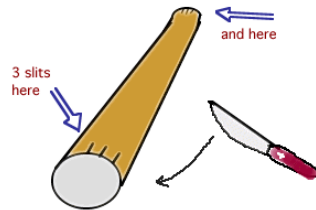
- A 2-3' sturdy cardboard tube. (Fabric tubes work best. Visit your local fabric store and ask for some used ones. They often come 5-6ft long, saw them down with an extra fine-toothed coping saw, or similar)
- A small block of wood, 2-3"
- Fishing line (40-80lb test filament fishing line will be loudest, braided line won't work as well)
- A tuna or pet food can, or a small piece of styrofoam

TOOLS: Non-serrated knife, Scissors

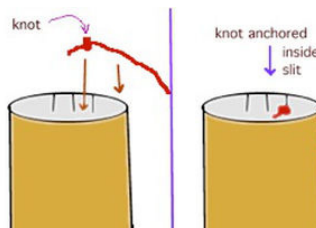
**Caution!** Instructions include common-sense simple tool use. You, the user, need to take all precautions to keep yourself safe.

watch John Bertles' how-to video: [bit.ly/tubetar](http://bit.ly/tubetar)

1. Using a sharp, non-serrated knife, cut 3 small slits at one end of the tube, about 1/2" apart and 1/2" long. Cut three more on the other end.



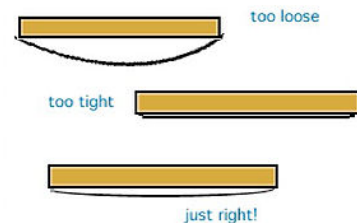
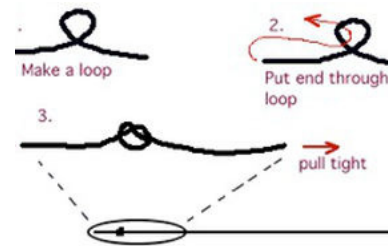
3. Tie a knot in the end of one fishing line string; double it if necessary so that it anchors in the slit with the knot inside the tube.



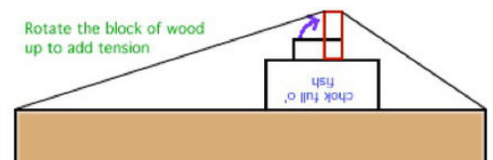
4. Repeat the process at the other end, making sure that the string has the correct tension.

Repeat for the other two strings: tie a knot and slip it in the slot on both ends. Consider making some strings slightly tighter than others (i.e. slightly shorter), so that each string will give a different pitch.

2. Cut three lengths of fishing line, each 6-12" longer than the tube.



5. Slide the can/styrofoam under the strings with the open end facing the tube. Then, slip the wood block under the strings on top of the can and rotate the wood upright so that it makes a kind of bridge. NOTE: Try making a series of small knots on the strings and see which knot gives just the sound you like.



## TO PLAY!

Pluck the strings with your fingers or strum with a pick (a penny is acceptable, stiff plastic is best). Change the pitches of the strings by playing like a Brazilian berimbau or Japanese koto. Play the longer end while pushing down on the other side of the bridge.

