

FROGGY

DIFFICULTY LEVEL: 3



When melting rosin we need the help of an adult!

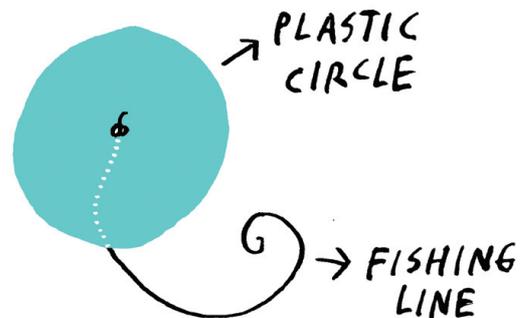


WE NEED:

- ★ a hollow cylinder, the diameter should be approximately 40 mm (1 5/8 ") and the length 50 – 60 mm (2 " – 2 3/8 "). It is best to use an HTEM pipe with a diameter of 40 mm, which is used for installation of household sewerage system; we can buy it in shops with building material.
- ★ a round stick from beech tree, the diameter should be approximately 8 - 10 mm (3/8 ")
- ★ a piece of thin hard plastic, 0.5 mm thick (1/64 "). If we can't find suitable waste plastic material we can use a so-called VIVAK sheet of the same thickness; we can buy in shops for model makers.
- ★ a piece of rosin, which is resin used for greasing bows of string instruments (It is sold in shops with musical instruments)
- ★ fishing line, approximately 0.4 mm (1/64 ") thick and approximately 120 mm (4 3/4 ") long
- ★ strong glue to glue plastic mixture
- ★ scissors
- ★ a small knife
- ★ a lighter

1 We cut out a circle from a piece of plastic which is the same as the diameter of the pipe. We make a tiny hole in the centre of the circle. The hole should be big enough for the fishing line to go through. We make a knot from the fishing line on one end so that the knot can't slip through the hole.

2 We glue the plastic circle to the rim of the pipe and wait until the glue dries.



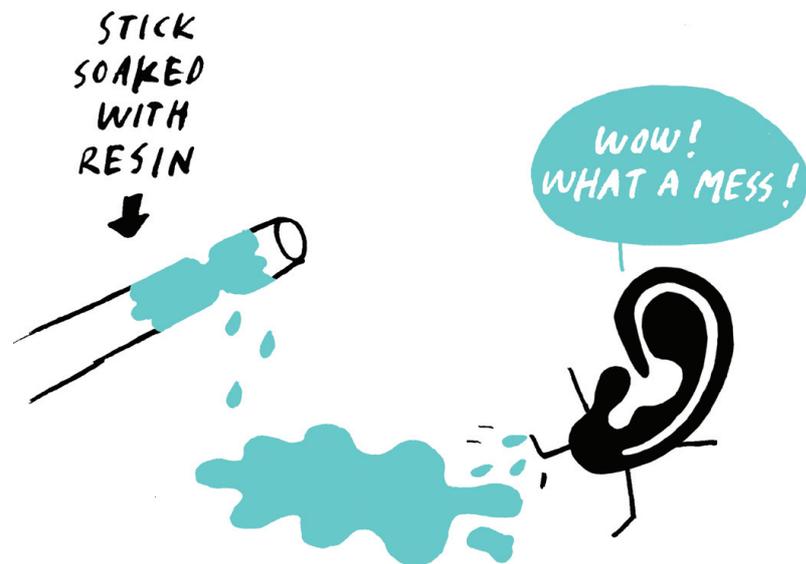
3 Approximately 15 mm (5/8 ") from its end we carve a notch into the stick; the notch should be approximately 2- 3 mm (1/16 ") deep and should go around the whole rim of the stick (see picture at 5.)

4 We place a piece of rosin on a plate and melt it with a lighter.



Be careful not to burn your fingers while doing that!

5 We dip the part of the stick where we made a notch into the melted rosin so that the notch is well soaked with it.



6 We form the fishing line into a loop around the notch. The loop should be loose enough so that the stick can spin inside it, and tight enough so that the loop doesn't slip from the notch.

We play the froggy by spinning the stick around its own axis and cover the bottom opening of the pipe with the other hand. We partly close the hole with straightening the index finger and thus change the sound of croaking. We can also turn the stick upwards and spin the pipe around the axis of the stick. The sound will sound like croaking of the whole frog choir in a pond.

The sound appears because of friction of the fishing line loop which rubs against the stick during spinning. Friction causes vibrations which transfer through the fishing line to the plastic circle attached to the pipe. This functions like a membrane and strengthens the sound of vibration, which is why the instrument belongs to the group of membranophones.

1st WAY OF PLAYING



2nd WAY OF PLAYING

