



Coat hanger Gong

You will need:

Metal coat hanger, 2 pieces of string around 30cm in length.

What to do:

1. Tie the strings to the corners of the coat hanger.
2. Hold the string in your hands so the coat hanger dangles downward.
3. Gently knock the coat hanger on a hard surface - is the sound loud or soft?
4. Wrap your fingers around each string and place your fingers in your ears.
5. Repeat the experiment with your fingers in your ear. Does the sound get louder or softer? Why?

Take it further:

Try using a plastic coat hanger or different materials to transport the sound to your ears.

The Science:

Sound is produced by vibrations. Vibrations travel faster through solids than they do through liquids or gasses. This is the reason why earthquakes can be detected hundreds of kilometres from their source.

Knocking the coat hanger against the surface makes the coat hanger vibrate. The vibrations travelled faster to your ear through the vibrating strings because they are solid.

