

DIY Guitar



minutes



difficulty

Tools & Materials:

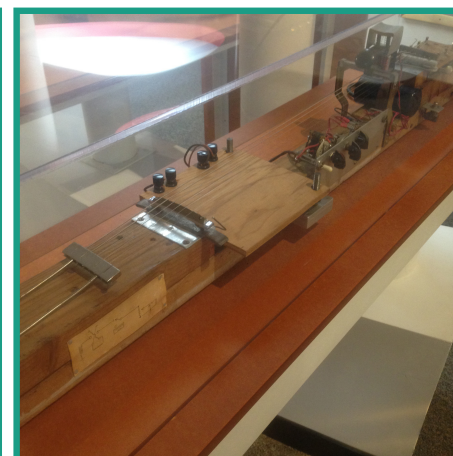
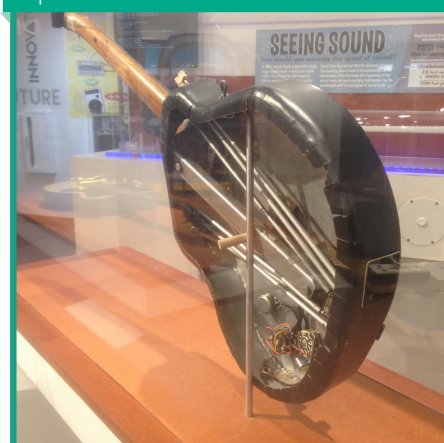


1. Body of the guitar (something hollow)
-A small box, altoid tin, empty box of tissues, etc.
2. Guitar strings
-Fishing line, thread, rubber bands, etc.
3. Guitar neck (something long and flat)
4. Scissors
5. Glue or tape

Introduction:

What makes a guitar a guitar? Les Paul asked himself this question throughout his life and spent his career experimenting with sound, designing instruments, and creating music. From filling a guitar with plaster to putting a string on an iron railroad rail, his legacy lives on through his designs. Experiment in the way Les Paul did by making your own guitar at home!

Inspiration from the Les Paul House of Sound Exhibit at Discovery World



Instructions:

1. Build the body of the guitar. Use a scissors to create a sound hole in the center of the hollow object. This will act as the guitar body.

2. Attach the neck to the top end of the guitar body.

3. Attach one end of each of your strings to the top of the neck and the other end somewhere beneath the sound hole in the guitar body.

- *As the strings are strummed, vibrations will be sent back and forth between each end of the string. The vibrations cause the guitar body to vibrate and create a tone.*

- *Experiment with different tensions on the guitar strings; more tension on the strings will result on a higher pitch, and vice versa.*

4. Play your instrument! The vibrations created from the strings escape through the sound hole. This hole focuses the sound, making it louder. Use these principles and experiment with sound! What happens if you change the shape of the sound hole? What happens if the guitar strings are a different thickness?

final product



Submit your guitar designs to
AtHome@discoveryworld.org
for a chance to have your design
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