

How to make a Variable Value Sensor

This describes how to make a sensor that returns different values depending on where it is touched creating a homemade 'slider'.

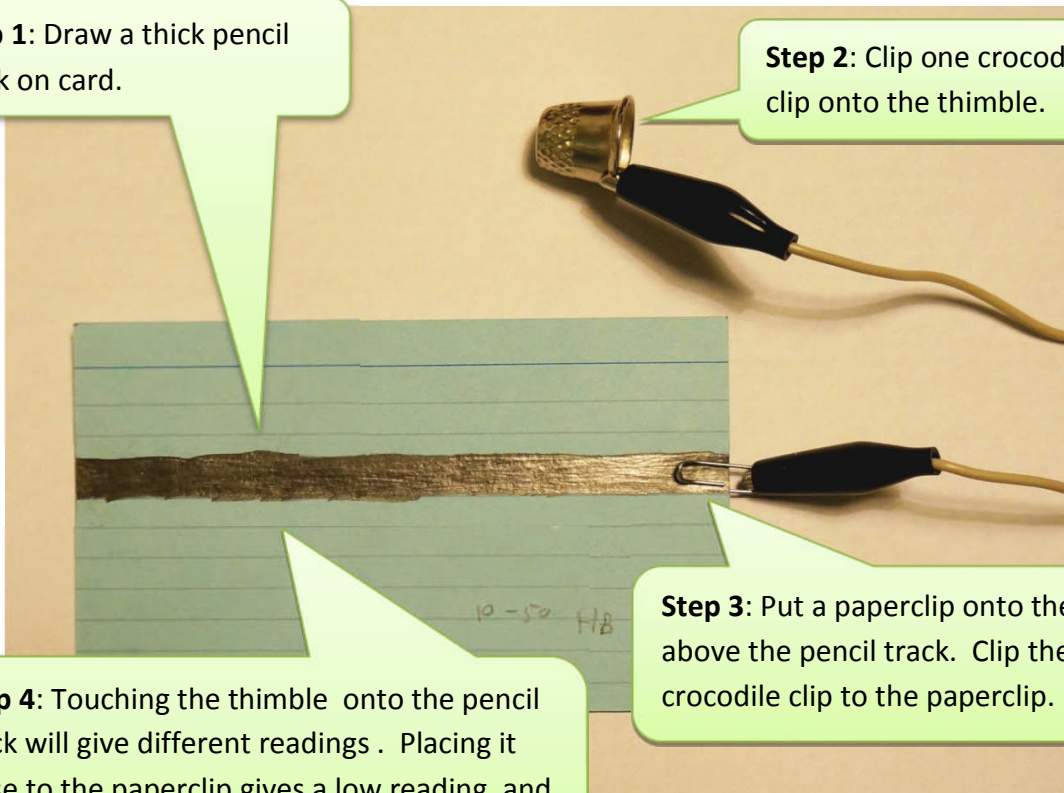
Lead pencils can be used to create a conductive track that gives different readings, depending on how far along the track is touched.

Note: a charcoal pencil gives a good range of sensor values.

Ingredients: card, charcoal pencil, paperclip, metal thimble

Step 1: Draw a thick pencil track on card.

Step 2: Clip one crocodile clip onto the thimble.



Step 4: Touching the thimble onto the pencil track will give different readings. Placing it close to the paperclip gives a low reading, and further away gives a higher reading.

Step 3: Put a paperclip onto the card above the pencil track. Clip the second crocodile clip to the paperclip.

Ideas:

Make a simple musical instrument by playing notes when the sensor readings are in a set range. Build a voting machine by placing a card on top of the pencil track with candidates' names on it, with holes where people can vote.

Safety: Please note that you use these resources at your own risk. Correct use of some components requires care.