

## **Flexible Wires**

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**Introductory paragraph:** This work is designed to test the stereognostic senses. It exercises the muscles of the hands and arms to distinguish between identical appearing wires that have a range of flexibility. The materials consist of four pairs of wires, with each pair being identically flexible, while the four pairs have different levels of flexibility. The wires are 20 centimeters long, all constructed within the sheath of a cable wire. Internally they use various types of wire 20 centimeters long, running alongside two 3-inch nails at either end acting as handles. The control of error in the work is that each wire has a pair and if two wires are incorrectly matched the last two wires will not match, requiring the work to be revisited. The wires are enclosed within the sheath of a standard cable wire, giving them a realistic technical appearance, but also have synchronicity with the sound cylinders and other matching works because the tips of the two pairs are circled with blue and red tape. The work is complete and original, providing a much-needed supplement to the general dearth of Montessori materials testing the stereognostic sense. This material is best presented to children over four. after most of the sensorial materials have already been presented and mastered. It should reside on the shelf with the stereognostic materials such as the mystery bag.

**Area:** Sensorial

**Materials:** 8 wires consisting of four pairs with differing degrees of flexibility. The wires appear identical other than four having red tips and their matching pairs having blue tips.

**Aims:**

**Direct:**

Development of the stereognostic sense.

**Indirect:**

Muscular discrimination of flexibility.

**Previous learning:** Carrying a tray, matching, sequencing

**Presentation:**

- 1) Invite child
- 2) Obtain the tray
- 3) Place on table
- 4) Remove one red wire from the tray and bend it back and forth, then hand it to the child to bend back and forth
- 5) Remove the remaining red wires one at a time, bend them, have child bend them, and line them up.
- 6) Remove one blue wire and bend it back and forth and then have the child bend it back and forth. Move down the row of red wires, bending each until a match is found. Lay the matching wires side-by-side.

- 7) Repeat the procedure for the remaining blue wires.
- 8) Return the wires to the tray.
- 9) Say, "This is the flexible wires work and it goes on the sensorial shelf."
- 10) Return the work.
- 11) In subsequent lessons use the three period lesson to introduce concept of "flexible" and "stiff."

**Points of Interest:** bending a material, using muscles, identical appearance of wires but different qualities.

**Control of Error:** All degrees of flexibility have a match.

**Variations:**

- 1) Place pairs on different sides of room and attempt to match them after walking across the room to get the pair.
- 2) Do the exercise blindfolded.

**Extensions:**

**Language:** Flexible and stiff.

**Age:** 4 - 6

**Notes:** Some children may bend the pairs into similar positions as a way of distinguishing them, and may even create designs with the bent wires.