

## LAB\_ Locating Touch Receptors

Name \_\_\_\_\_ Period \_\_\_\_ Date \_\_\_\_\_

**Purpose:** To find where touch receptors are located on the body

**Materials:** (4) 2-point-sensor cards, you and a partner

1. Cut a 3 by 5 index card into thirds.
2. Mark the first card with two dots 0.5 cm apart.
3. Mark the second card with two dots 1 cm apart.
4. Mark the third card with two dots 2 cm apart.
5. Mark a 4<sup>th</sup> card with just one dot.
6. Use a straight pin to put a tiny hole in each dot.
7. Put a round toothpick through each hole 1 cm.

### Procedure:

1. Have your partner turn his/her head away from you so that he/she can't see what you are doing!
2. Using the 0.7cm side of the 2-point sensor card, carefully touch your partner on the back of the neck, lower part of the leg, inside of the forearm, on the palm of the hand, back of the hand, and fingertips. Be sure not to apply too much pressure.
3. If your partner feels **two points** in any of the areas that you touch, place the number 2 in the appropriate place in the data table. If your partner feels only one point, place the number 1 in the data table.
4. Repeat steps 2 and 3 for the 1.5 cm and 2.0 cm sides of the 2-point sensor card.
5. Once you have completed the data table for your partner, switch roles and repeat the entire procedure.

**Data table 1**      Subjects name \_\_\_\_\_

Body part	0.5 cm	1.0 cm	2.0cm	0 cm
Back of neck				
Finger tips				
Palm of hand				
Back of hand				
Inside lower arm.				

**Data table 2**

Subjects name \_\_\_\_\_

<b>Body part</b>	0.5 cm	1.0 cm	2.0cm	0 cm
Back of neck				
Finger tips				
Palm of hand				
Back of hand				
Inside lower arm.				

**Conclusion:**

8. Which part of your partner's body has the most touch receptors? Explain how you know this.
  
9. Which part of your partner's body has the least touch receptors? Explain how you know this.
  
10. Rank your partner's body from most to least sensitive (using the parts that you tested).
  
11. What did you learn about the distribution of touch receptors in the skin?