**Factors that affect reaction rate lab**

**Name: Date:**

A. Prelab:

1. What is another name for **neurons**: \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_
2. How are neurons similar to other cells?
3. How are neurons different from other cells?
4. What are **sensory neurons**?
5. In what organs would you find sensory neurons (name all 5)
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What are **motor neurons**?
7. How many steps does your body go through to catch a falling ruler?
8. What is **reaction time**?
9. Describe what happens during a reaction time?

B. Lab write up:

**Question**:

**Hypothesis**:

How will using your hand dominance (using the hand you write with) affect your reaction rate (faster or slower?)

How will temperature of your hand affect your reaction rate (faster or slower?)

How will fatigue (how tired you hand is) affect your reaction rate (faster or slower?)

**Procedure**: The procedure for this lab can be found in the B.C. Science Probe 8 textbook pages

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Procedural flow chart**:

**Materials:** The materials for this lab can be found in the B.C. Science Probe 8 textbook pages

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Observations and Results**:

Step 2: Using dominant hand

What was the distance that the ruler fell? \_\_\_\_\_\_\_\_\_\_\_\_ cm

Step 3: Trial 2 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 3 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Step 4: Subjects dominant hand (circle one) = left right

Step 5: Using **non-dominant** hand

Trail 1 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 2 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 3 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Step 7: Using **fatigued** dominant hand

Trail 1 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 2 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 3 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Step 9: Using **cold** dominant hand

Trail 1 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 2 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

Trail 3 results \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

**Analysis**:

|  |
| --- |
| c) |
| d) |
| e) |
| f) |
| g) |

**Evaluation**:

|  |
| --- |
| h) |
| i) |
| j) |

**Conclusion**:

* Has identified important information gained in the experiment (what was the purpose of the lab, what was it trying to teach you?)
* Has supported what they learned by giving an example from the lab
* Information is correct