Name: _____ Group: _____ Date: _____

LAB 63 EXPERIMENT

REFLEXES

STUDENT BOOK | Chapter 7, page 206

Goal

Determine if the reaction time of a reflex varies between one hand and the other hand.

1. What are the independent variables in this lab?

_____

_____

2. What is the dependent variable in this lab?

_____

_____

Hypothesis

I think that _____

because _____.

Materials

- 30-cm ruler

Procedure

1. Assign a task to each team member:
  – Test subject: Person who stands upright.
  – Experimenter: Person who holds the ruler.

2. The test subject spreads the thumb and the index finger of the right hand 1 cm apart.

3. The experimenter holds the ruler vertically with the 0 mark at the bottom just above the test subject's right hand.

4. At an agreed signal, the experimenter drops the ruler.

5. The test subject catches the ruler between the thumb and the index finger as quickly as possible.

6. Practise two or three times, then record the measurement indicated on the ruler by the test subject's index finger.

7. Take two or three measurements.

8. Calculate the average of the results.

9. Repeat steps 2 to 8 with the left hand.

10. Repeat steps 2 to 9 by reversing the roles of the team members.

11. Put away materials.

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Results

Record your results in the table below. Give the table a title.

Title:

Test subject	Measurement indicated on ruler	
	Right hand	Left hand
1		
2		

Analysis of the results

1. Is the reaction time of the reflex the same for both hands? Explain your answer.

_____

_____

2. Explain variations and differences.

_____

_____

3. Are the results the same for each test subject?

_____

_____

4. What are the possible sources of error in this lab?

_____

_____

5. How could you improve the protocol for this lab?

_____

_____

Name: _____ Group: _____ Date: _____

Conclusion

1. Complete the following sentence:

Reaction time _____ between one hand and the other hand.

2. Was your hypothesis confirmed or not? Explain your answer.

_____

_____

Application

What are the advantages of having good reflexes?

_____

_____