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

**Title: Respiration Lab**

*Directions: Most parts of this lab report are to be written neatly on this sheet. Each part will be checked for completion and stamped the day it is due, on this sheet of paper! You will earn full credit for completing each section by the appropriate due date. At the end you will use this to help you write your final lab report.* ***This paper will be turned in for a grade, separate from your final lab report grade.***

**PART A: Testable Question**: How does body position affect lung tidal volume?

Identify keywords or conditions that are necessary to test this question (i.e. variables)

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

Stamp:

**PART B: Developing Background Questions**

*Directions: Using the keywords you listed in Part A develop some background questions related to the testable question above. Record your questions in the chart below.*

|  |  |
| --- | --- |
| **Question Word** | **Possible Question** |
| Why | Ex: Why does the diaphragm move during breathing?  Why \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |
| How | Ex: How do the lungs allow for gas exchange?  How does \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?  How does one measure \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |
| What | Ex: What is the function of the respiratory system?  What are characteristics of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?  What affects \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? |

Stamp:

**PART C: Researching Answers to Your Questions**

*Directions: Circle your best question from Part B that is most relevant to the testable question (Part A). While you read the attached background information, be sure to look for and record the answers to your questions below. Be sure to include an appropriate quote and citation in your answer.*

|  |  |
| --- | --- |
| Question | Answer |
| 1. | 1. |

Stamp:

**PART D: Writing Your Essay (Review of Literature)**

*Directions: Use the outline below to write a brief paragraph on a separate sheet of paper.*

1. Background Question (i.e. why, how, what, when, where)
   1. Main Idea (introduce and answer question)
   2. Evidence (answer found through research; paraphrased or directly quoted)
   3. Link (elaborate or make sure it is clearly explained)
   4. Conclusion (Summarize answer to question and transition to next question)

*Things to Remember:*

1. *3rd person only (no I, me, you, we, us, our, etc)*
2. *Direct quotes and paraphrased information must be cited. (ie. According to…, \_\_\_ states…, etc)*

Stamp:

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

Stamp:

Respiration Lab (continued)

**PART E: Question and hypothesis**

*Directions: Write a testable question. Then use the testable question to write your hypothesis.*

* 1. Class testable question: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Independent variable(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dependent variable: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. Hypothesis:

If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(what you are doing; indep. var) (what you expect to see; dep. var)

because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Stamp:

**PART F: Materials and Procedure**

*Directions: Using the list of materials provided by the teacher write your materials list below:*

*Directions: Write a procedure that you should use to test the testable question.*

|  |
| --- |
| Procedure |
|  |

Stamp:

**PART G: Results**

* + 1. Data Table: *Create a data table for the experiment.*

Stamp:

* + 1. Graph: *Create a graph based on the data on a separate sheet of paper (preferably graph paper)*

Stamp:

**PART H: Conclusion**

*Directions: Write your conclusion on a separate sheet of paper, using the following outline.*

1. Main Idea – state your hypothesis and whether it was supported or not supported by your experiment
2. Evidence – provide numerical evidence and be sure to compare different data from different variables
3. Link – make a connection between what you found in your evidence and what you found in your background research

Stamp:

1. Conclusion – summarize your findings

**PART I: Final Draft**

*Directions: Using all the things that you have completed from this worksheet, write (or type) your final draft neatly in the following order.*

* Title – from the top of your worksheet
* Purpose – testable question from Part E
* Hypothesis – Part E
* Background Information – essay from Part D
* Materials and Procedure – Part F
* Results – data table and graph from Part G
* Conclusion – Part H