**Diffusion/Osmosis Design Lab** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Blk: \_\_\_\_

**Criterion C** (*rough copy*)

**Analysis:**

1. **Graph your Data**:

The independent variable range goes on the x-axis, and the dependent variable goes on the y-axis. *(Remember to use the averages of your trials, label your graph:* title*,* x-axis, y-axis*, and* units*, and then include a line-of-best-fit.)*

1. Summarize and **interpret** your data (include the averages from your data), and then **describe** your results. Use science to describe WHY this happened. *(Can you link this to what we are learning about in class?)*

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**Conclusion:**

* 1. **Discuss** the validity of your hypothesis based on the results. Write a statement discussing if your **hypothesis** was supported or contradicted (not supported), and **why**.

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* 1. **Discuss** the validity of your **method** based on the results. Write about the following:

(1) Problems or errors in your lab procedure/method;

(2) Suggestions for improving the lab for next time;

(3) How your findings compared to other students’;

(4) Other extensions/questions that you have now that you have finished the lab. Describe your curiosity!

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**Criterion C: Processing and Evaluating**

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| --- | --- | --- | --- | --- |
| **8-7** | **6-5** | **4-3** | **2-1** | **0** |
| **correctly collect, organize, transform and present** data in numerical and/or visual forms | **correctly collect, organize and present** data in numerical and/or visual forms | **correctly collect and present** data in numerical and/or visual forms | **collect and present** data in numerical and/or visual forms | Not met any of the descriptors listed |
| **accurately interpret data** and **describe** results **using correct scientific reasoning** | **accurately interpret** data and **describe** results **using scientific reasoning** | **accurately interpret** data and **describe** results | **accurately interpret** data | Not met any of the descriptors listed |
| **discuss** the validity of a hypothesis based on the outcome of a scientific investigation | **outline** the validity of a hypothesis based on the outcome of a scientific investigation | **state** the validity of a hypothesis based on the outcome of a scientific investigation | **state** the validity of a hypothesis **with limited reference** to a scientific investigation | Not met any of the descriptors listed |
| **discuss** the validity of the method based on the outcome of a scientific investigation | **outline** the validity of the method based on the outcome of a scientific investigation | **state** the validity of the method based on the outcome of a scientific investigation | **state** the validity of the method **with limited reference** to a scientific investigation | Not met any of the descriptors listed |
| **describe** improvements or extensions to the method that would benefit the scientific investigation. | **outline** improvements or extensions to the method that would benefit the | **state** improvements or extensions to the method that would benefit the scientific investigation | **state limited** improvements or extensions to the method. | Not met any of the descriptors listed |

**Explain**: Give a detailed account, with scientific reasoning and connections between situations, events, patterns and processes

**Describe**: Give a detailed account or picture of a situation, event, pattern or process

**Outline**: Give a brief account

**State**: Give a specific name, value or other brief answer without explanation or calculation

**Transform**: to change in form, appearance, and or structure

**Present**: Offer for display, observation, examination or consideration

**Organize**: Put ideas and information into a proper or systematic order

**Interpret**: Use knowledge and understanding to recognise trends and draw conclusions from given information

**Discuss**: Offer a considered and balanced review that includes a range of arguments, factors or hypotheses.

Opinions or conclusions should be presented clearly and supported by appropriate evidence

**Summarize**: Abstract a general theme or major point(s)