Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class \_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

**Model Organism Project**

This project will consist of three main parts: a research paper (20pts), a poster (20pts), and a presentation (10pts). The entire project is worth a total of fifty (50) points, which is the equivalent to two (2) test grades. I will guide you along the way and if you have any questions or need help, please ask.

**Research Paper:**

You must include the following topics in your paper:

* Scientific Name
* History and Background
* Organism characteristics
* Research Potential (Why study it?)
* Pros and Cons of your organism
* Conclusion

Format

* 1-2 pages
* Double Spacing (2.0)
* Times New Roman and 12 point font
* 5 paragraph essay format
* Name and title
* Must have at least 5 credible sources
* **YOU MUST CITE YOUR SOURCES – Papers without sources will NOT be accepted.**
  + Cite your sources using:[**http://www.easybib.com/**](http://www.easybib.com/)

**Poster:**

For the poster, please use regular poster board or a tri-fold poster. The poster itself should have the following:

* The scientific and common name of your model organism.
* Multiple pictures of your organism, its niche, the food it eats, what eats it, etc.
* Highlights from the topics you wrote about in your paper and facts you found in your research.
* The poster should be full of pictures and/or information about your organism, and there should be very little white/blank space left of the poster.
* Lastly, the poster should be colorful and visually pleasing.

**Presentation:**

You and your partner will present your poster, as well as, the information you wrote about in your paper (the poster itself should be reflection of your paper). The presentation should follow the following criteria:

* The presentation should seem well organized, planned, and practiced.
* If you worked in partners, both partners must speak during the presentation.
* The presentation should be three (3) to five (5) minutes in length minimum.

**Model Organism Characteristics**

**Instructions: Please fill out this chart using research from credible sources. Please make sure to list all of the resources you use so you can cite them later on when completing the paper.**

|  |  |  |
| --- | --- | --- |
|  | **Characteristics** | **Name of Organism:** |
| **1.** | Complete taxonomic classification of organism (K,P,C,O,F,G,S) |  |
| **2.** | Historical context and background |  |
| **3** | Prokaryote or Eukaryote |  |
| **4.** | Physical Size (Length and Mass) |  |
| **5.** | Generation time |  |
| **6.** | State of Nuclear Genome Sequencing (Completed, In Progress, Not Initiated)  \*If so, what is the size of Nuclear Genome |  |
| **7.** | Mechanism(s) of reproduction (Asexual, Sexual, or Both) |  |
| **8.** | Relationship to other organisms (list several close relatives) |  |
| **9.** | Ease to work with (how hard is it to obtain, grow, maintain, reproduce, etc.?) |  |
| **10.** | Financial position (Relative monetary costs and needs of working with this organism) |  |
| **11.** | Research potential (are biochemical, cellular, developmental, genetic, molecular, morphological, physiological, behavioral, ecological, environmental, etc. tools available?) |  |
| **12.** | Ethical benefits vs. concerns/constraints for use in research |  |
| **13.** | Potential for use in basic/fundamental work vs. specialized studies |  |
| **14.** | Photograph(s) of the organism (if there are sexual dimorphisms for organism, images of both sexes should be provided). |  |
| **15.** | Other (include in this category any other interesting facts or reasons why this would make a good model organism) |  |

**Resources:**

*List your resources (5 minimum)*