**Genetic Disorder Project**

Students will independently develop a poster for his or her assigned disease. The poster needs to be neat and have some type of image or pictures present. Students will present the posters to the class. The poster will include the following:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grading Criteria** | **Superior** | **Above Average** | **Satisfactory** | **Needs Improvement** | **Substandard** | **Not Present** |
| Name of Disorder | 5 | 4 | 3 | 2 | 1 | 0 |
| Genetic Inheritance | 10 | 9 | 8 | 7 | 6 | 0 |
| Percentiles in Population | 10 | 9 | 8 | 7 | 6 | 0 |
| Effected Body Systems | 10 | 9 | 8 | 7 | 6 | 0 |
| Symptoms | 10 | 9 | 8 | 7 | 6 | 0 |
| Treatment | 10 | 9 | 8 | 7 | 6 | 0 |
| Picture | 10 | 9 | 8 | 7 | 6 | 0 |
| Interesting Fact | 10 | 9 | 8 | 7 | 6 | 0 |
| Presentation | 25 | 23 | 20 | 18 | 15 | 0 |
| Total |  |  |  |  |  |  |

**Infectious** **Disease Project**

Students will independently develop a poster for his or her assigned disease. The poster needs to be neat and have some type of images or pictures present. Students will present the posters to the class. The poster will include the disease’s:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grading Criteria** | **Superior** | **Above Average** | **Satisfactory** | **Needs Improvement** | **Substandard** | **Not Present** |
| Name of Disease | 5 | 4 | 3 | 2 | 1 | 0 |
| Scientific Name | 10 | 9 | 8 | 7 | 6 | 0 |
| Scientific Kingdom | 10 | 9 | 8 | 7 | 6 | 0 |
| How it is Contracted | 10 | 9 | 8 | 7 | 6 | 0 |
| Body Systems Affected | 10 | 9 | 8 | 7 | 6 | 0 |
| Symptoms | 10 | 9 | 8 | 7 | 6 | 0 |
| Treatment | 10 | 9 | 8 | 7 | 6 | 0 |
| Interesting Facts | 5 | 4 | 3 | 2 | 1 | 0 |
| Picture | 5 | 4 | 3 | 2 | 1 | 0 |
| Presentation | 25 | 23 | 20 | 18 | 15 | 0 |
| Total |  |  |  |  |  |  |

**Psychological Disorder Project**

Students will independently develop a poster for his or her assigned disorder. The poster needs to be neat and creative. It should have some type of images or pictures present. Students will present the posters to the class. The poster will include the disorder’s:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grading Criteria** | **Superior** | **Above Average** | **Satisfactory** | **Needs Improvement** | **Substandard** | **Not Present** |
| Name of Disorder | 5 | 4 | 3 | 2 | 1 | 0 |
| Cause of Disorder | 10 | 9 | 8 | 7 | 6 | 0 |
| Percentiles in Population | 10 | 9 | 8 | 7 | 6 | 0 |
| Population Affected | 10 | 9 | 8 | 7 | 6 | 0 |
| Body System Affected | 10 | 9 | 8 | 7 | 6 | 0 |
| Symptoms | 10 | 9 | 8 | 7 | 6 | 0 |
| Treatment | 10 | 9 | 8 | 7 | 6 | 0 |
| Picture | 5 | 4 | 3 | 2 | 1 | 0 |
| Interesting Fact | 5 | 4 | 3 | 2 | 1 | 0 |
| Presentation | 25 | 23 | 20 | 18 | 15 | 0 |
| Total |  |  |  |  |  |  |

**Science Fair Project**

Students are to independently designa science experiment in which he/she completes over the semester. This project should reflect the thought level of an honors high school student and present a valid idea to experiment. Students are allowed to design their own experiment or use one found on the internet. All ideas must be approved by the teacher prior to beginning the project. On the assigned day, student will present the project to the class. Student can either use a tri-fold display board or poster board to display the information. The following points of the scientific method should be included on the poster:

* Hypothesis: stating the idea or purpose behind the experiment
* Materials and Safety: what materials were used and any safety procedure that should accompany them
* Procedure: a step by step outline of how to complete the experiment
* Data: raw numerical results organized in a chart and/or graph
* Result: interpretation of the data in regards to trends, averages, and maximum/minimum values
* Conclusion: the results are explain in regards to what they imply and if the hypothesis is correct and possible errors in the experiment
* Picture: a picture of the experiment being performed

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Grading Criteria** | **Superior** | **Above Average** | **Satisfactory** | **Needs Improvement** | **Substandard** | **Not Present** |
| Hypothesis | 10 | 9 | 8 | 7 | 6 | 0 |
| Materials and Safety | 10 | 9 | 8 | 7 | 6 | 0 |
| Procedure | 10 | 9 | 8 | 7 | 6 | 0 |
| Data | 10 | 9 | 8 | 7 | 6 | 0 |
| Graph or Chart for Data | 10 | 9 | 8 | 7 | 6 | 0 |
| Results | 10 | 9 | 8 | 7 | 6 | 0 |
| Conclusion | 15 | 13 | 11 | 9 | 7 | 0 |
| Presentations | 25 | 23 | 20 | 18 | 15 | 0 |
| Picture | +5 | +4 | +3 | +2 | +1 | 0 |
| Total |  |  |  |  |  |  |

**Research Paper**

In correlation with your science fair project, you will independently write a research paper. The paper should be at least 4 pages of text and no more than 10 pages. It should be in 12 point font, Times New Roman, double spaced with 1 inch margins. The first pages should have your name, course name, and date in the right hand corner, single spaced.

Karen Collier

Honors Chemistry

9/29/2010

The consecutive pages will have your last name followed by the page number. This will be on one line in the right-hand corner.

Collier 2

Do not procrastinate! Pick a topic and start completing your research. Use valid sources, not Wikipedia. One of your sources must be a scientific journal and you must have at least five sources total. Include a bibliography at the end of your research paper. Use MLA format to cite your sources correctly. It would be a good idea to create an outline before beginning your paper. This will help you know where to go next in your writing. I have a very simple outline below. You need to proofread and need to have other people proofread your paper. Read your paper out loud to yourself and others. If you are struggling, please come see me before it’s too late!

Topic: Asbestos Poisoning

1. Introduction
   1. Definition of Asbestos Poisoning
   2. Significance of the Study
   3. Definition of Terms
2. Body
   1. Symptoms of Asbestos Poisoning
   2. Effects of Asbestos Poisoning
   3. Treatments
3. Conclusion
   1. Conclusion
   2. Recommendations
      1. How to Deal with Asbestos Hazards

Below are a few websites that could be helpful:

* Steps in Writing a Research Paper: <http://www.esc.edu/esconline/across_esc/writerscomplex.nsf/0/ccf81b03ecdc507c852569c3006589e0>
* Writing Research Papers: http://www.ruf.rice.edu/~bioslabs/tools/report/reportform