1. **Project introduction** ( what is it about?) Use the first two articles for background information ( Use APA Citation )
2. **Layers of the earth** diagram and paragraph.
3. **Project Summary Paragraph 1(The Composition of the Earth)**: Write a paragraph explaining in detail the composition of the earth and how scientists discovered this with the use of earthquakes. Cite evidence from the Earth Composition Lab to support your reasoning. Be sure to include numerical facts on the depth and composition of each layer. Site any outside sources you used in reference to drawing your model of the earth. Talk about real world use of seismic technology ( Article by Bob Hardage ) with proper citation.

4. **Project Summary Paragraph 2(Heat Transfer in Liquids):** Write a paragraph explaining in detail the second law of thermodynamics and the ways that heat can travel. How does heat travel inside the Earth and how does this result in earthquakes? Compare and contrast convection and conduction with examples. Be sure to include data from your Heat Transfer lab to support your reasoning**.** Cite any outside sources you used.

5. **Project Summary Paragraph 3 ( Calculating the Binomial Probability of Earthquakes) :** Write a paragraph explaining in detail the probability of different magnitude earthquakes happening. How can this be used to calculate the probability of a large earthquake occurring? Use numerical data from your Energy of an Earthquake activity and Binomial Probability of an Earthquake lab to support your answers. Cite any outside sources used.

6. **The Conclusion/ Summary Paragraph** : Where you provide the big picture by explaining how everything that you talked about ties in together about earthquakes!! Also talk about next step/ future research. Restate your original thesis.

The **minimum length of the report is 2 pages**. However, for a report containing all relevant information, data and proper citation it should be much longer.

DUE DATE : **11/ 14/ 17**

LAST DATE FOR SUBMISSION ( W/ points taken off for late submission ) : 11/ 17/17

TOTAL POINTS : 30 WEIGHTED AT 70%

GRADING RUBRIC

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Category | Exceeds  Standard  (5) | Meets Standard  (4) | Nearly Meets  Standard (3) | Does not  Meet  Standard (2) | No  Evidence  (1) | Score |
| Title Page | Title Your Name, Course Period, Date, Neatly finished-no errors | Evidence  Of 3 | Evidence of 2 | Evidence of 1 | N/A |  |
| Introduction | Clearly and concisely states the paper’s purpose in a paragraph, which is engaging, and thought provoking. | Clearly states the paper’s purpose in a single paragraph. | States the paper’s purpose in a single paragraph. | Incomplete/unfocused | N/A |  |
| Body | Each paragraph has thoughtful supporting detail sentences that develop the main idea, along with all evidence. | Each paragraph has sufficient supporting detail sentences that develop the main idea, along with some evidence. | Each paragraph lacks supporting detail sentences. | Each paragraph fails to develop the main idea. | N/A |  |
| Organization | Writer demonstrates logical sequencing of ideas through well-developed paragraphs; transitions are used to enhance organization | Paragraph development present but not perfected. | organization of ideas not fully developed. | No evidence of structure or organization. | N/A |  |
| Conclusion | The conclusion is engaging and restates the thesis. | The conclusion restates the thesis. | The conclusion does not sufficiently restate the thesis. | Incomplete/unfocused | N/A |  |
| Citation | All cited works, both text and visual, are done in the correct format with no errors ( APA Format) | Some cited works, both text and visual, are done in the correct format. Inconsistencies evident | Few cited works, both text and visual, are done in the correct format. | Only 1-2 cited works, both text and visual, are done in the incorrect format. | N/A |  |