**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade: \_\_\_\_\_\_\_\_\_/100 points**

**Principles of Design: Bridge Contest Rubric**

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|  |  | **Criteria Categories** |  |  |
| **Criteria** | **Novice****0-13 pts** | **Developing****14-15 pts** | **Accomplished****16-18 pts** | **Exemplary****19-20 pts** | **Points****Earned** |
| **Research****and Plan** | Research was not relevant to the problem. The research did not include the proper information. The plan had hardly any details and/or is not easy to follow. | Research selected was sometimes relevant, but not always accurate and complete. The team did not explore any facets of the bridge design. The plan had limited details. | Research selected was relevant and was mostly accurate and complete. The team explored some facets of the bridge design. The plan included how they addressed the design principles and was easy-to-follow. | Research selected was highly relevant to the problem. The team examined different facets of bridge design. The plan included how they addressed the design principles. The plan was detailed and easy-to-follow. |  |

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| **Technical****Drawing** | No design drawing or reading and understanding drawing was difficult. Minimal idea development was evident. The plan had no key details or dimensions, or contained unrelated details. | Drawing needed improvement. There was poor idea development andSequencing between sketches and drawing.There are elaborated and/or repetitious details. Most key details and dimensions were missing. | Drawing communicated design. Some idea development supported by relevant details.Drawing details made major points easy to follow. Drawing contains most key details and dimensions. | Drawing communicated design clearly.There is evidence of analysis, reflection and insight.Drawing contains all key details and dimensions. |  |
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| **Design and****Construction** | There was no bridge constructed or the team used none of the design principles in their bridge design. The bridge was poorly constructed, and there was no documentation of how it was built. | The team considered only a few of the design principles in their bridge design. The bridge was not well constructed and documentation is lacking. | The team considered most design principles in the bridge design. The bridge is well constructed, but the team lacked documentation. | The team considered the appropriate design principles in the bridge design.Construction well documented and could be easily replicated. |  |
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| **Testing and****Conclusions** | The bridge was not complete so that testing could take place. | Testing was complete, but the bridge was not able to meet most requirements.The team could not present a logical explanation for their findings. | Testing was complete and the bridge was able to meet most requirements. The team could not present a logical explanation for their findings. | Testing was rigorous and the bridge was able to meet expected requirements.The team presented a logical explanation for the findings. |  |
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| **Presentation** | Material was not related to the research and plan.Points are vague and evidence was weak to support claims. Information is not presented in a logical sequence and makes it hard to follow. Poor visuals (if any) are not included and/or there are numerous misspellings or grammar errors. | Material was not always related to the research. Few points supported claims.Information was not well presented.There are several misspellings. | Material was clearly related to the research and plan. Most points supported claims.Information was supported in a logical manner, which the audience can follow. | An abundance of material was clearly related to the research and plan was presented.Points are clearly made and evidence was used to support claims.Information was presented in a logical and interesting sequence, which the audience can follow. Good visuals were included. The presentation had no misspellings or grammatical errors. |  |
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| **Teacher Notes:** |  |  |  |  | **Total** |