**Title:** Performance-Based Rubric

**Project Title: If You Build It, Will It Fly??????**

**Grade Band Team:** 6-8 C

**Team Members:** Shanon Rodenberg, Bruce Brewer, Jean Polk, Steve Schauf, Roxanne Kravik, Brenda Freit,

 July 28, 2011

**Description:** Students will design and build a glider based on what they have learned about the forces of flight and necessary design requirements of all airplanes. Students will participate in a variety of lessons including: observing the necessary parts of a plane, forces of flight, Bernoulli’s Principle, and Newton’s laws of motion. Students will then design, test, revise, and fly their gliders with the goal of flying it in a straight path, covering as much distance as possible.

|  |  |  |
| --- | --- | --- |
| **Grading Criteria** | **Points possible** | **Rating Scale** |
| Participation in flying and making observations with the demonstration glider | 10 Scale X 2 | 1Minimal participation and little to no observations made | 3Participated with some observations made | 5Participated in flying and wrote observations  |
| Diagram of Bernoulli’s Principle | 5 X 1 | 1Diagram little evidence of understanding the principle | 3Diagram shows one of the 2 pressures correctly | 5Diagram shows high and low pressure with arrows |
| Completed Pre and Post Gizmo Quiz | 5 X 1 | 1Completed only the pre-quiz | 3Completed only post-quiz | 5Completed pre and post quizzes |
| Designed and Constructed a Glider | 20 X 4 | 1Design did not keep in mind necessary components of flight | 3Design reflects necessary components of glider, has revisions but lacks documentation | 5Design reflects necessary components of a glider, revisions based on experimentation with documentation |
| Notes | 15 X 3  | 1Minimal notes from the 3 lessons | 3Has notes, but not complete | 5Forces of flight \_\_\_\_\_Design and construct\_\_\_Let ‘em Fly \_\_\_\_ |
| Participation in the Team Flight Activity | 10 X 2 | 1Flight chart not completed. Poor cooperation. | 3Chart completed but not consistent with data  | 5Team effectively worked together to complete the flight chart and make design improvements. Team cooperation. |
| Post-Assessment | 15  | --------- | --------- | Score based on # of questions answered correctly |
| Unit Reflection | 10 X 2 | 1Paragraph that answers at least 1 of the required questions | 3Paragraph that answers at least 2 of the required questions | 5Quality paragraph that answers: what you’d do different, what you did well, and what you learned. |
| **Completed Unit** |  80 Pts |  |  |  |