**Student:** Adrienne Brown

**Course Title:** 7th Grade Science, Family 1

**Teacher:** Aaron Dobie

**Class Description**:

In 7th grade science this summer we focused on the study of biology, the subject Denver Public School students study in the seventh grade. Under the umbrella of biology we began the summer with photosynthesis – the process by which plants make their own food out of water, carbon dioxide and sun energy. We then studied food chains, food webs and how energy is transferred between different trophic levels – producer, primary consumer, secondary consumer, tertiary consumer – of the food chain. In addition to photosynthesis and food chains we learned some “how to” skills such as identifying experiments’ independent and dependent variables, graphing experimental data and labeling graphs’ x axes, y axes and titles. Students got to record and graph their own data in experiments such as “Does a person’s head size affect their 40 yard dash time?” During the last week we synthesized all of the summer’s ideas into the “Solar Oven Experiment” where students created their own solar oven out of a pizza box, aluminum foil, saran wrap and tape in order to harness the sun’s power and cook pizzas and s’mores. The ovens got as hot as 180°F. In addition to cooking food we tested whether black ovens worked better than white ovens. Students kept track of their ovens’ internal temperatures and graphed the black ovens’ temperatures side by side to the white ovens’ temperatures to decide which colored oven was more effective. The black ovens worked better. Students had to complete a final packet for the “Solar Oven Experiment” and show an understanding of all parts of the scientific method – asking a question, making a hypothesis, writing experimental procedures, gathering materials, recording data, graphing the data and interpreting their graphs in a paragraph-style conclusion.

**Academic Performance**:

Adrienne is a talented young woman whom the Denver Public School system needs to keep an eye on because of her great potential in the classroom. This summer she learned all of the presented scientific concepts with ease. I was especially impressed with how quickly she caught onto graphing. We took a science pre-test on the 3rd day of class and took the same test again during the last week to gauge student improvement. Adrienne had a nearly perfect score on the post-test and a big portion of the test was graphing a series of exponential data and predicting the graph’s future behavior. At the end of the third week we took a test that included the details of photosynthesis and identifying independent and dependent variables. One area I think Adrienne could improve in is how she studies for tests the night before. If she were to have sat down for just 15 minutes to review the notes from the first three weeks I think she could have taken her score on the Photosynthesis Test from good to great. A little study time could help her remember the small, forgettable details like the differences between stomata and chlorophyll that she missed on the test.

**Behavior and Attitude**:

Happy-go-lucky, smart, and filled with wit, Adrienne provided a running commentary in science class. The first 4 weeks she was somewhat reserved in class but the last two weeks she came out of her shell and really began to talk it up. Because the material came easy to her she sometimes complained about being bored in class and I agree that she was. Although I tried to challenge her, I suggest that Adrienne take the most challenging classes possible in middle school and high school in order to keep herself challenged. When she does find herself understanding the material faster than her peers I think she could work on being patient in class and keeping a positive attitude. Overall, though, Adrienne was a pleasure to have in class and I have only the highest of hopes for her in the future.