**Student:** Adriana Elias

**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**:

Attentive, laughable and hard-working, Adriana was the epitome of a good student this summer in science class. Everyday I could count on her to know the answer to any question I asked and to do her work in an unrushed, complete fashion. She had a 100% record for doing her homework this summer and did very well on every test we took as a class.

On the third day of school we took a science pre-test and then took the same test during the last week to gauge student improvement. Adriana had a nearly perfect score on the post-test and showed improvement in her ability to interpret exponential graphs and make predictions about their future behavior. She has a great understanding of the inputs and outputs of photosynthesis and the ways in which animals and plants store energy. She built a terrific solar oven and was meticulous about recording her oven’s exact temperature over the course of a 30 minute period in the sun.

I hope that Adriana takes the most challenging classes possible in middle school and in high school. She is a young lady capable of incredible things and not a doubt in my mind exists that she can do anything she puts her mind to. It was a pleasure to teach Adriana this summer.

**Behavior and Attitude**:

During the first 2 weeks I thought Adriana was too shy to raise her hand in the classroom but as the summer progressed she came out of her shell and raised her hand highly whenever she had a question or knew the answer to a question. Also, she was very comfortable explaining the concepts we were learning to other students in the class. Not only is she a great student, she is a great teacher as well! Adriana was excellently behaved for the duration of the 6 weeks.