**Student:** Elijah Meyers

**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**:

Logical, quick-tongued and social, Elijah was often the focus of attention in science class this summer. His math skills were evident at the beginning of the course when on the third day of class we took a science pre-test to gauge student knowledge and Elijah was one of the only students to correctly predict the growth of an exponential graph. During the second, third and fourth weeks he was engaged in class as we learned about plants’ production of glucose via photosynthesis. He asked questions, paid attention in class, did his homework and got a good grade on the first test. There were only a few incidents that I had to talk with him one-on-one because of in-class behavior issues.

As a summer educational program, Breakthrough has a much more fun-filled social atmosphere and relaxed social code than West Denver Prep. This being said, I think Elijah realized these differences during the fourth week of school and didn’t quite know what to do with this newly found social freedom. At Breakthrough, it is often up to the students to make good decisions on their own. For example, from the first day of Breakthrough it was made clear that in the morning students should come directly to the cafeteria to turn in their homework when they get off of the buses. After they do this and only after they do this are they allowed to go outside and hangout until 8:45 when the school days’ activities would begin. For the last two weeks, more often than not, Family 1’s teachers, myself included, would have to go outside to hunt down Elijah to get his homework. The responses we received were often lies, such as, “It’s in my locker, I lost my binder, or I gave it to another teacher.” One time he was caught on the bathroom floor in the morning doing the previous night’s homework. Because he did not do his science homework for the majority of the last two weeks he had to complete it during his lunch period and during the “Micromadness” (recess) period in the afternoon. Instead of biting the bullet and taking advantage of this time to complete the work which he was surely capable of understanding, a negative spiral downwards began wherein he became frustrated with his teachers for making him complete the work and did not the makeup work or the next night’s work. The culminating incident in science was on the last day. All 16 of Elijah’s classmates had turned in his or her final Solar Oven project that morning but I had to sit with Elijah for almost one hour answering questions that had been answered time and time again during the class time allotted to work on the project.

Overall I believe that Elijah is an incredibly capable young man inside and outside of the classroom. In the classroom, when paying attention, he can answer the questions asked and present unique viewpoints and cool random facts about outer space. Outside of the classroom, as a vocal person, he could be a great leader and positive influence among his peers. I would not be writing this comment if I didn’t believe Elijah capable of great things.