**Student:** Carolyn Wakefield

**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**:

Energetic, smart, and equipped with a great smile, Carolyn was a positive force in science class this summer at Breakthrough. She did her homework nearly every night and this nightly practice helped her to do well on all 3 of our tests. The biggest test, taken at the end of the 3rd week covered photosynthesis, independent and dependent variables and Carolyn got the equivalent of an “A” on it. One way Carolyn could improve in school is by being more vigilant about studying for tests the night before. By just spending 15 minutes the night before to read over her notes and review the material I’m confident that Carolyn could turn her good grades into excellent grades. On this note, I think that Carolyn should enroll in the most challenging classes available in middle school and high school so that she falls in with a group of students who routinely study together before tests. Carolyn is a natural leader among her peers and I think her schoolwork could greatly benefit from getting involved with study groups.

**Behavior and Attitude**:

As mentioned before, Carolyn is a leader among her friends as witnessed by her lead role in the two dances that they performed in front of the whole school. As a leader, though, students follow Carolyn’s example when it is both good and bad. Sometimes Carolyn got a bit talkative during class.