Conclusion

During the investigation with our mealworms, we were able to see the metamorphosis of the mealworm in a controlled environment. We observed the mealworms once a week for six weeks and noted qualitative and quantitative data, predictions, and future questions. We observed their transformations, habits, and preferences throughout the investigation and determined a few conclusions from our data collected.

Conclusions that were noted were that the mealworms enjoyed the dark environment, and the oats served as their shelter. We know this because every week the mealworms were buried underneath all the oats and we always had to search to find them. The mealworms were also more active under the oats then they were when exposed to direct light. In direct light, the mealworms barely moved. The apples we provided in their controlled environment served as their food source. The mealworms liked the taste of the sweet apples. The apples provided the energy source for the mealworms to transform into the next life phase as an in-star.

Since we were not able to observe the mealworms every day, it was undetermined how several of our mealworms died within the first few weeks. We were also unable to tell if their activity varied while we were not handling them. We did notice that the bigger the mealworm got the more skin it began to shed. Also, the bigger the mealworm got the less the mealworm moved, because of its conservation of energy to morph into its in-star phase. As mealworms turned in to in-stars, it took them about a week or so until they became a beetle, the final stage of its life cycle. While our mealworms were in-stars, they became a slightly different shade of tan. The in-stars also did not move at all, they were completely motionless. Only one of our mealworms made it as far as a beetle. Several of our mealworms died, and we even had one in-star die. Our last day resulted in 1 beetle, 3 mealworms, and 0 in-stars out of the 11 total mealworms we started with.