

## Practice Identifying Strategies 4 and 5 in Student Work

Students use variegated green fabric to simulate a grassy environment and colored pom-poms to represent beetles of various colors that live in this environment. Several students play the role of lizards hunting for beetles. When the hunt command is given, they open their eyes and snatch the first pom-pom they see on the fabric. The lizards hunt six times, and then students calculate the number of each colored pom-pom the lizards ate and the number of beetles that survived.

Decide whether each of the following student statements is making an observation, collecting data, analyzing/ interpreting observations or data, or constructing an explanation or argument. Use the STeLLA strategies booklet and the Quick Reference Tools for Strategies 4 and 5 to formulate a rationale for your decisions.

Student Statements	Observations/ Data	Analysis/ Interpretation (Patterns)	Constructing an Explanation	Constructing an Argument
1. “Four green beetles survived at the end of the simulation.”				
2. “I think more green beetles survived at the end because they blended into the environment.”				
3. “I think if we did this again, the number of beetles remaining in each color would be different each time because it was kind of all just chance.”				
4. “I agree that the number of each color of beetle that survived would be different if we tried this again, but I still think more green beetles would survive because they’re the most camouflaged.”				
5. “In the grassy environment, fewer green beetles were eaten, and most or all of the red beetles were eaten.”				
6. “Even though the green beetles blended in, some of them were still eaten because a lizard happened to be nearby or had especially good vision.”				
7. “The color of the fabric matters. If the fabric is green, more green beetles can hide from the lizards, but if the fabric were a different color, more beetles of that color would survive.”				