

Creating an Explanation

These questions will prompt you in preparing an explanation of the phenomenon. Giving an individual explanation of the phenomenon we have been studying for the past two weeks will be a large part of your test (which is next period). The more detailed you are on this study guide, the better you will perform on the test.

- 1. What is the question we are trying to answer?**
- 2. What is your claim? (Probably similar to the one I am making right?)**
- 3. In a given population of one species of birds, would you expect to see all of the beaks be the same size or would they vary? Describe how they might vary.**
- 4. Give a few examples of forces that can affect the survival of organisms. What is the term for these forces?**
- 5. How does the variation in beak size of the population of birds relate to the forces that affect survival of organisms?**
- 6. In a population of birds, what happens (over time) to the distribution of traits which are favorable in a given situation? (Example: trait of robust beak in a situation where most of the food is large and tough to crack)**
- 7. In a population of birds, what happens (over time) to the distribution of traits which are *not* favorable in a given situation? (Example: trait of slender beak in a situation where most of the food is large and tough to crack)**

8. Use your answers to the previous questions to put together an explanation just like how we talked about as a class. You can use your model and these questions to help you explain the phenomenon. Remember you are: making a claim, supporting it with evidence, and linking the evidence to the claim with reasoning

Key Words to use in your explanation: Selection Pressure, Traits, advantage/disadvantage, beak size, variability, climate, compete/competition, reproduce/reproduction, ancestral species/ancestral population, change in frequency of traits.