1. Introduction paragraph
   1. First sentence: How do we account for all of the diversity of organisms on the earth?
   2. Next sentences discuss what you are going to talk about in your two other paragraphs
   3. Transition to the next paragraph
2. First body paragraph
   1. Overall your paragraph should answer the question how do the following affect variation of a species?
      1. Mutations
      2. crossing over of chromosomes during meiosis
      3. sexual reproduction vs asexual reproduction
   2. to start
      1. define or explain what variation is
      2. define or explain how mutations occur
      3. define or explain how crossing over occurs and what it does
   3. to expand
      1. explain why mutation increases variation include the terms
         1. chromosomes
         2. alleles
         3. locus
      2. explain effects of crossing over on variation include the terms
         1. chromosomes
         2. alleles
         3. gametes
      3. explain effects of sexual reproduction on variation include the terms
         1. chromosomes
         2. alleles
         3. gametes
3. How to write your second body paragraph
   1. Topic sentence: Errors during the process of protein synthesis can affect variation.
      1. Fact or definition from lecture about protein synthesis
      2. summary of protein synthesis process
      3. concrete detail transcription
         1. Errors
            1. how they can occur
            2. effect of errors to the organism (think expression of protein)
      4. concrete detail translation
         1. Errors
            1. how they can occur
            2. effect of errors to the organism (think expression of protein)
         2. Concluding sentence: explain how errors during protein synthesis affect variation.
4. Third paragraph criteria
   1. Explain how the following affects biodiversity.
      1. Natural selection
      2. Genetic drift
      3. Gene flow (migration)
   2. Incorporate the following in your explanations
      1. Change in allele frequency
      2. Variation
      3. Mutation
      4. Fitness
      5. Adaptation
5. Conclusion paragraph
   1. Restate thesis statement
   2. What did you talk about or review the main points
   3. End the essay.