Natural Selection: Weigh the Evidence

Scientific ideas can never be proven true. They can only be disproved, or proven false. To disprove an idea, it takes evidence that **contradicts** it. That's why contradicting evidence is the most important kind for helping scientists refine and update their ideas.

1. In the table, write in the title(s) of the evidence you have been given.

2. Read through the evidence, keeping these questions in mind.
   - What is the trait?
   - How is it helpful to the organism in a certain environment?

3. Read the evidence again and consider whether it contradicts any of the models. Think about the questions below; if the answer is no, the evidence contradicts that model.
   a. Did each individual organism in the population change its own trait?
   b. Do organisms with the trait have a better chance of surviving and reproducing in a certain environment?
   c. Does having the trait make an organism stronger and healthier?

4. Place an **X** under any model that this evidence **contradicts**. *Include your explanation.*

Evidence	Natural selection happens because...		
	Model A (Lamar): ...individuals change their traits to better fit with a new environment.	**Model B (Alex):** ...individuals with helpful trait variations are more likely to reproduce.	**Model C (Juan):** ...individuals that are strong and healthy are better able to adapt to a changing environment.

5. After class sharing, complete page 2 of *Natural Selection: Three Models*.