

# Natural Selection: Three Models

## Read carefully:

Conceptual models are sets of ideas that explain phenomena. Phenomena are observable things that happen in the world around us.

Natural selection is a process through which the traits in a population can shift over time. For example:



Rock pocket mouse populations living in some habitats have changed over time to have darker fur.

### A group of students is discussing their understanding of natural selection.

**Lamar:** When the environment changes, individuals change their traits to better fit with the new environment. Over time, these helpful trait variations become more common in the population.

**Alex:** Individuals with helpful trait variations are more likely to reproduce, passing their traits to the next generation. Over many generations, these helpful trait variations become more common in the population.

**Juan:** Individuals that are strong and healthy are better able to adapt to a changing environment. When individuals with the traits that make them strongest and healthiest reproduce, each generation is better adapted.

## Answer questions 1 & 2 only

1. Do you most agree with Lamar, Alex, or Juan? \_\_\_\_\_
2. Explain your thinking, as it relates to the rock pocket mouse phenomenon above.

## STOP HERE

NAME \_\_\_\_\_ DATE \_\_\_\_\_

**Answer questions 3-5 after you have completed *Natural Selection: Weigh the Evidence***

**3.** Do you most agree with Lamar, Alex, or Juan? \_\_\_\_\_

**4.** If you changed your mind, explain why.

**5.** List one piece of evidence from *Natural Selection: Weigh the Evidence* and explain why it supports the model you chose.