

Name _____

Lizard Evolution Virtual Lab

Go to: <http://media.hhmi.org/biointeractive/vlabs/lizard/>
Complete all four modules and answer the questions below:

Module 1 - Ecomorphs

In this module, you learned that lizards with similar traits evolved on different Caribbean islands.

1. How are ecomorphs and niches related?

2. How does this relate to niche specialization? (use your textbook)

Module 2 - Phylogeny

1. Based on this phylogeny, do lizards of the same body type tend to be more closely related to one another than to lizards of different body types? Provide evidence.

2. In general, are lizards on the same island more closely related to one another than to similar-looking lizards from other islands? Provide evidence.

Module 3 – Experiment

The observation that lizards with certain traits, such as short legs or long tails, live in particular environments, such as twigs or grass, suggests that these traits are adaptations—in other words, they provide some improved function to lizards living in those environments.

To test whether that is the case, you performed an experiment. If placed in a new environment, will anoles adapt certain traits that provide some improved function?

1. What did you find out? What is your evidence?

2. How do different traits evolve? Be careful in your wording.

Module 4 – Dewlap colors

1. Lizards in different habitats have evolved different traits, but how do we know when they become different species?

2. How is evolution the mechanism for biodiversity? In other words, why are there so many species of anoles? And how did they evolve?