Bio 24.1

Goals: compare and contrast artificial selection to natural selection

Artificial and Natural Selection

Bellwork:

You are stranded on a tropical island in the Pacific Ocean. You have no supplies with you other than your clothes.

- What would be your first priority?
- What would you do for food? What types of food would you expect to find on a tropical island?

Video: "Why Produce Used to Suck"

1) Why does fruit exist in nature at all?
2) Why would nature not produce the same bananas we enjoy? Why might our bananas be a bad thing?
3) What are some foods that come from the same plant?
4) Which produce fact most surprised you?

	Natural Selection	**Artificial Selection**
How?		
Why?		
Effects		

Evolution:

Lamarck: Acquired traits, debunked

Darwin: inheritance and natural selection

Modern understanding: darwin's understanding with new insights with DNA and heredity

Reflection:

1) Is an organism ever "done" evolving? Why or why not?
2) What happens to an organism if it cannot adapt to a new environment?
3) Identify any organism (can be your favorite animal or plant) and describe how a change in the environment could force this organism to evolve. Describe the environmental change and then hypothesize what features, mutations or adaptations would help the organism survive in the new environment.

Bio 24.2

Goals: identify how natural selection would shape a population of organisms

Plan: Students will work in a small group to read scenarios and predict how populations will adapt given the available information (see handout)

HW: complete discussion questions

Bio 24.3

Goals

* Describe the process of evolution by natural selection

* Use understanding of natural selection to make predictions in specific scenarios

Plan

Overview of place in the course

Emphasize the focus on ideas

Why study evolution? How does NASA look for life? (5 min)

Video: How to Spot an Alien, According to NASA (10 min)

Evolution by natural selection, an overview and example (10 min)

Video: Natural Selection - Crash Course Biology #14 (10 min)

Activity: Evolution by natural selection problems (remainder)