

CHAPTER 2 – NATURAL SELECTION AND REPRODUCTION



19 Lessons
Natural Selection

2.6: Reviewing Key Ideas About Natural Selection

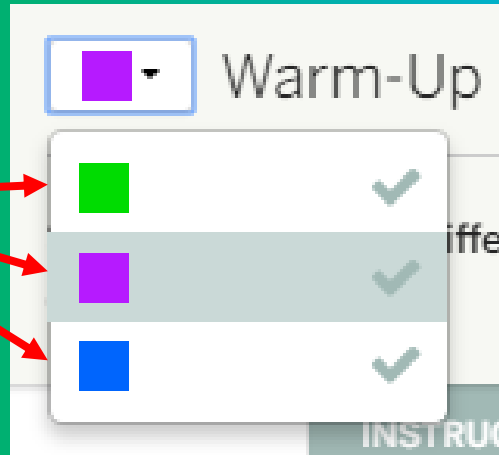




2.6.1: WARM-UP

HAND IN

Students complete **differentiated** Warm-Ups that prepare them for the activities in the remainder of the lesson.



GREEN GROUP

Observing Traits

In today's lesson you will complete a Sim activity. Review the Neck-Length Histogram below of an ostrilope population from that Sim activity.

PURPLE GROUP

Exploring a New Population

In this lesson, you will explore a new population of ostrilopes and carnithons.

BLUE GROUP

Understanding Environmental Conditions



2.6.2: PREPARING FOR THE LESSON

We learned in previous lessons;

- **That traits are passed down from generation to generation.**
- **We also learned that individuals with adaptive traits are more likely to survive and reproduce.**
- **The individuals that survive pass down their adaptive traits to their offspring.**
- **This is how adaptive traits become more common in a population over time.**



2.6.2: INVESTIGATING ADAPTIVE TRAITS

Students complete differentiated activities related to their learning needs. (17 min)



GREEN GROUP

Predicting Changes to Ostrilope Populations

PURPLE GROUP

Ostrilope Reproduction and Adaptive Traits

BLUE GROUP

Reading "Otters and the Bottleneck Effect"

REVIEWING THE REMAINING ACTIVITIES

3 **CLASS**

Understanding Reproduction
and Adaptive Traits



4 **HOMEWORK**

Self-Assessment (Optional)

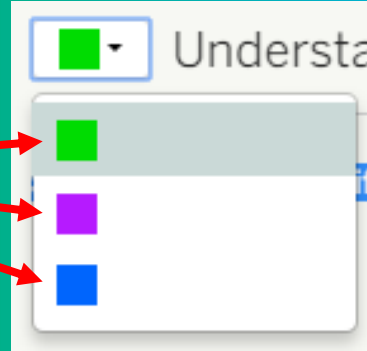




2.6.3: UNDERSTANDING REPRODUCTION AND ADAPTIVE TRAITS

HAND IN

**Students
complete
differentiated
activities
related to
their learning
needs.
(17 min)**



GREEN GROUP

Ostrilope Reproduction and Adaptive Traits

PURPLE GROUP

Reading "Otters and The Bottleneck Effect"

BLUE GROUP

Creating a Bottleneck Effect in an Ostrilope Population in the Sim



2.6.4: SELF-ASSESSMENT

HAND IN

Check Your Understanding

This is a chance for you to reflect on your learning so far. **This is not a test.** Be open and truthful when you respond to the questions below.

Scientists investigate in order to figure things out. You have been investigating why the newt population in Oregon State Park became more poisonous over time in order to share your ideas with biologist Dr. Alex Young. Are you getting closer to figuring out why the trait for high-poison level became more common in the newt population over time?

1. I understand how a histogram can be used to represent and describe the traits in the newt population.

yes

not yet

Explain your answer choice.

2. I understand why high-poison levels are adaptive in one environment but not adaptive in another.

Explain your answer choice.

3. I understand how the number of newts with high-poison levels increased over time.

Explain your answer choice.

4. I understand why a new trait may or may not become more common in a population.

Explain your answer choice.

5. What do you still wonder about how the trait for high-poison level became more common in the newt population over time?