Darwin's Finches: Natural Selection

By Edward Awad

Out of Class

In Class (Instructor)

In Class (Students)

Begin Here.

Students are given a sheet with the topics to be covered, including key concepts, learning outcomes, and assigned readings

Students do assigned readings and watch videos* about evolution and natural selection

Students do a quiz through Moodle to test what they have learned from the video and readings

15 min

Instructor:

- Reviews key concepts from pre-assigned material
- Answers any questions students might have from the pre-assigned readings, videos, or quiz

Students get into groups of 3 at a table with an interactive whiteboard

There are two groups per table and interactive white board

5 min

Instructor:

- Introduces the activity and verbally goes over the instructions with the entire class
- Hands out materials* to each group

Refer to "Materials" pdf for a list of required materials

1min

In their **groups**:

- Students have 30s to collect as many seeds as possible with their beaks*
- Each student participates in seed collection

Refer to "Instructions" pdf for a description of seeds and beaks

5-10 min

In their **groups**:

- Students count the number of each seed type they collected
- Add their group's data to the excel sheet* on the interactive white board

Refer to "Data Chart" pdf for an excel template

5 min

Instructor:

- Divides class into two sides
- Distributes new seed containers to the class*
- Side 1 gets a different type of seed in their container than Side 1

Students remain in their original groups of 3

01

1 min

In their **groups**:

- Students have 30s to collect as many of the new seed type as possible with their beaks
- Each student participates in seed collection

5-10 min

In their **groups**:

- Students count the number of each seed type they collected
- Add their group's data to the excel sheet on the interactive white board

5 min

Using the data from the excel file, **groups** answer questions* related to natural selection, evolution, and the class results

Refer to "Questions" pdf

10 min

Class discusses answers to the questions

02

Instructor proceeds with 5 clicker questions*

Refer to "Clicker" pdf

10 min

Students **individually** answer clicker questions

If the majority of students incorrectly answer a particular question, the instructor takes up that question with the entire class

- Individual Work
- Work in Groups
- Whole Class
- Reading
- Research
- Problem Solving
- Discussion
- Instruction
- Quiz
- Game