



Beaks of Finches Lab

I CAN explain how differences in inherited traits can affect the survival of a species

Slide #1: Introduction

Use the words below to fill in the introduction on the lab write-up document

- Adapted (2x)
 - Desirable
 - Food
 - Inherit
 - Isolation
 - Natural Selection
- Reproduce
 - Resources
 - Survive
 - Traits
 - Variations

- Slide #2: Motivation: Analyze the beaks in the image below.
- Predict which beak will be most successful at picking up small seeds. Which beak will be least successful?

Small seed island



Petri dish



Large seed island



Timer



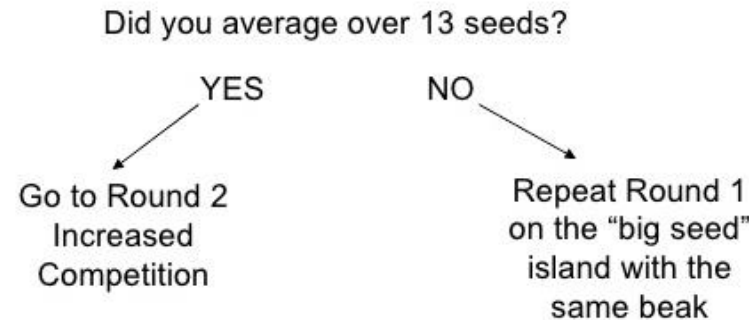
A randomly assigned "beak"



Slide #3: Round 1 All "beaks" feed from small island



	"Beak binder clip"	"Beak clothespin"	"Beak plyers"	"Beak Chopsticks"	"Beak Tongs"	"Beak Tweezers"
Trial #1	12	6	14	2	4	15
Trial #2	11	4	11	1	5	14
Trial #3	9	7	16	2	6	16
Trial #4	13	3	13	3	8	13
Average						



If the bird "beak" was successful at picking up an average of 13 seeds or more, they remain on the original island. IF NOT, the birds must migrate to a new island with larger seeds

Slide #4: Round 2: Feeding with competition



	NEW ISLAND: Large seeds				ORIGINAL ISLAND: Small Seeds	
Beaks	Binder clips	Clothespin	Chopsticks	Tongs	Plyers	Tweezers
Trial #1	15	3	2	13	16	14
Trial #2	16	6	6	15	14	11
Trial #3	18	4	7	12	15	12
Trial #4	14	7	5	14	16	10
Average						

Which of these 6 birds averaged 13 or more?

If the amount of seeds collected is less than 13- That bird did not eat enough and became extinct!

Slide #5: After Round 2, Who survived? Who went extinct?

	Survived (was able to collect 13 or more seeds)	Became extinct (could not collect 13 or more seeds)
Binder clips		
Clothespin		
Pliers		
Chopsticks		
Tongs		
Tweezers		

THINK!!!

What beak characteristics enabled the birds to collect 13 or more seeds and survive??

What other characteristics (besides the shape of beak) can help a bird survive?