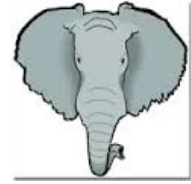


Natural Selection Lab: Tusk versus Tusk less Elephants



Name: _____

Date: _____ Period: _____

Pre-Lab Questions:

1. Do you think having tusks is a helpful trait for Asian elephants? Why or why not?
2. What do you think would happen to an elephant population in Sri Lanka if ivory poachers stopped killing the elephants for the ivory?

Safety: Inform the teacher of any food allergies or conditions that might apply to this lab

Materials: Each team should have:

- 20 pieces of white candy, in a zip-lock bag
- 40 pieces of red candy, in a zip-lock bag
- Small paper bag

Procedure:

1. Decide which partner will represent a **“forest”** where Asian Elephants live and which one will represent an **“ivory poacher”**. (You will change places each round.)
2. Put 20 white and 20 red candies into the paper bag and mix them up.
3. The **“ivory poacher”** reaches into the bag without looking and removes one candy.
 - If the candy is white (tusked elephant), the **“poacher”** puts it back in the zip-lock bag of white candies. This represents a poacher killing the elephant.
 - If the candy is red (tusk less elephant), the **“poacher”** puts it back in the **“forest” paper bag**, and adds two (2) more red candies to represent the tusk less elephants offspring.
4. Repeat Step “3” **four more times**, *switching roles with your partner each time.*

Observations & Data:

1. For each round, record if you chose a white or red candy:

Round 1: White or Red

Round 2: White or Red

Round 3: White or Red

Round 4: White or Red

Round 5: White or Red

2. With your partner, count the white candies (tusked elephants) and the red candies (tusk less elephants), record your answers below.

	Red Candy “tusk less elephant”	White Candy “tusked elephant”
Start	20	20
Round 5 (End)		

3. Record your data on the class data table.

Data Analysis:

1. Explain what happened to the number of white and red candies after your repeated step 3 five times.

Explanation of Key Questions Based on Evidence:

2. How does this investigation represent what is happening to the Asian elephant population in Sri Lanka?

3. What do you think would happen to an elephant population in Sri Lanka if ivory poachers stopped killing the elephants for the ivory? (Base your answer on the information you gathered from this investigation, give detail.)

4. Do you think having tusks is a helpful trait for Asian elephants? Why or why not? (Base your answer on the information you gathered from this investigation, give detail.)

Reflection:

5. What do all the results from each lab group have in common?

6. What does this mean for the future of the elephant population in Sri Lanka?