Big Bird Directions

Materials: BEAKS - spoon, chop sticks, tweezers, clothes pin, tongue depressors, scissors
FOOD - beans, string, popcorn, styrofoam, cotton balls, toothpicks
BIRD STOMACHS - plastic cups
FEEDING AREA - plastic tray, lab box

Procedure:

RULES

- A bird's beak is attached to 1 neck so you will use 1 hand to collect food.
  - You may not use the other hand to help gather food or hold the beak.
- You must swallow each food item (put it in your stomach/cup) before you pick up another.
  - Birds may not steal food from another bird's stomach (cup).
- Listen to and follow instructions given to you by the keeper of the aviary (your teacher).

1. Randomly pass out the beaks so that each person has a different beak. You should take a beak also. If you have more beaks than birds, just leave one beak out.
2. You will put out the food onto the tray one type at a time. It doesn't matter what order you do it in. Spread the food out so that all of the birds have equal access to it. On your teacher's signal the birds will compete for the food and try to gather as much as they can.
3. Stop the birds after one minute or after all of the food is eaten, whichever happens first.
4. After each bird counts the pieces of food he/she has eaten have them record each bird's data on their data table.
5. Repeat for the other 5 types of food. (Note: Float the styrofoam pieces on water in your lab box.)
6. At the conclusion of the feeding frenzy all items should be back in the appropriate containers, beaks collected and all materials returned as you found them: complete, clean and dry.
7. Calculate percent of each food eaten by each bird for your graph.
   Add up the total number of pieces of a particular kind of food (the sum of each column on your data table).
   Divide the number of pieces each bird ate by the total number of pieces.
   Multiply by 100 to get the percent of each food eaten by each bird.
   GRAPH THIS PERCENTAGE, NOT YOUR RAW DATA (# OF PIECES).
8. Answer the questions on the back of your handout individually. You may confer with your group members on #13 but remember all answers must be in your own words.
How Are Beaks Adapted To The Foods Birds Eat?

Directions: Follow the directions read to you by your group leader. Use the data table below to record the types of beaks, types of food and amounts of each food eaten by each "bird." Use the graph to present the amounts of food eaten as a line graph. Answer the summary questions on the back.

Data Table One:

<table>
<thead>
<tr>
<th>Student's Name</th>
<th>Type of Beak</th>
<th>Food 1:</th>
<th>Food 2:</th>
<th>Food 3:</th>
<th>Food 4:</th>
<th>Food 5:</th>
<th>Food 6:</th>
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</table>

Graph: Amount Of Food Eaten By Each Bird

Key

- Bird 1
  - Beak:

- Bird 2
  - Beak:

- Bird 3
  - Beak:

- Bird 4
  - Beak:

- Bird 5
  - Beak:

- Bird 6
  - Beak: