BECOMING AN ARCHAEOBOTANIST: STUDENT ACTIVITY PACKET

Hypotheses and Observations

Directions: Before you begin Activity One: Soil Flotation, make predictions, and write down your hypotheses! Record your observations after completing Activity One. You will continue to refine your answers in Activity Two.

Before Activity 1:

1. List 3-5 types of plant foods that might show up in the soil samples. What condition will they be in? For example, will they be burned? Broken? Seeds? Shells?:

2. Will the soil samples of the teams in your class have the same information as yours? Why or why not?

After Activity 1:

1. Although the light and heavy fractions are still not dry, what plants do you think you can identify? What condition are they in (are they burned, broken, whole)?

2. Do you notice any preliminary similarities or differences between your samples?

3. What other questions do you have after looking at this data?

ACTIVITY TWO: DATA TRACKING SHEET

Directions: Divide the plant remains in your light and heavy fractions by seed type. Count the number of each type of seed and record the information below. Fill out a data tracking sheet for each one-liter sample.

Light Fraction

Plant Type:	Count:
Example: Corn kernel	8
Unidentifiable	
Total:	

Heavy Fraction

Plant Type:	Count:
Unidentifiable	
Total:	

Directions: After Activity Two, Part 1, record your observations.

1. What is the total number of plant remains in this one-liter sample?

2. Which plant type had the highest count? The lowest count?

3. Which plant remains were hardest to identify and why?

4. Are there any notable differences or similarities between each light and heavy fraction sample?

5. Are the plant remains in this sample mostly edible plant parts, inedible plant parts, or a combination?

6. What, if anything, can these plant remains tell you about seasons or the time of year they may have been eaten?

7. Now that you used a comparative collection to identify the plant remains, how did your observations change from your observations in Activity 1?

8. How did your observations change after analyzing the data?

9. What other questions do you have after looking at this data?

ACTIVITY TWO, PART 2: CLASSROOM SYNTHESIS AND DATA ANALYSIS

Classroom Discussion Questions:

- What was the dominant plant type in each feature?

- Which feature had the highest concentration of plant remains? Which had the greatest variety of plant types? What could this mean?

- What is the most frequently identified plant among all the features at this archaeological site?

- What other variability to do you notice?

- Based on your observations, can you make inferences on what activity each feature was originally used for? Remember, plant remains can be found in features like cooking fire pits, storage pits, trash pits, processing stations, and more.

- Think about the time of year or season each plant type could be harvested or gathered. Does the data provide insights to the season when each feature may have been used?

- Think back to the discussion on decomposition and carbonization. How do these processes impact our conclusions? What parts of plants and types of plants would we not expect to find based on these processes?

- What other questions do you have after looking at this data?

- How did your observations change after analyzing the data with your class?

ACTIVITY TWO, PART 3: WRITE AN ARCHAEOLOGICAL REPORT!

Directions: Based on what you now know about the variety and concentration of plants and your inferences on seasonality and activities, what conclusions can you make about the diet of the people you're analyzing? What other information does the data reveal about the archaeological site? Construct an argument to make predictions about 1) what people were eating at this archaeological site, 2) what food-related activities were happening at the archaeological site, and 3) the time of year these activities occurred. Use all of the data and evidence you have recorded to support your argument.

Incorporate the following vocabulary words: Archaeobotany, Carbonization, Data, Feature, Flotation, Heavy Fraction, Light Fraction, Macrobotanical, Soil Sample

Extension: What evidence was preserved at this archaeological site and what was not (e.g. animal bones, plants that did not burn, cooking vessels)? How would additional information impact your arguments? How does missing information impact an archaeologist's interpretations of a site?