



TIME TEAM AMERICA

Identifying Seeds

Math: Grade Level: K-6



Courtesy U. S. Department of Agriculture

MATERIALS

The materials needed for this activity are:

- Fruit
- Seeds from fruit

NOTE: Archaeologists use basic techniques when trying to identify seeds. Size, shape, texture, structure, and color are important characteristics. It's like playing a matching game, you find a seed and see if you can remember what plant it is associated with. However, because there are so many varieties of seeds at any given location, archaeologists rely on the many seed identification resources available to them on the Internet.

Pollen identification, on the other hand, is very different from seed identification. Pollen grains have distinct features called pores and furrows. Each grain is unique, and may have pores but no furrows, and visa versa. Some grains have both. Microscopes are necessary to identify pollen.

How Does Archaeology Connect to Botany?

During excavations archaeologists uncover a variety of artifacts, including food remains. By using scientific practices to identify preserved seeds and pollen remains, archaeologists can hypothesize the types of foods people might have been eating when they occupied the site.

What?

Youth will learn how to identify different types of seeds and associate them with the fruit they grow into.

Why?

Like archaeologists, youth will engage in scientific practices.

How?

Before:

- Create a few stations on a table. At each station place a different type of fruit. The fruit should be cut open so that the seed is exposed.
- On a separate table make several stations with the seeds from all of the varieties of fruit displayed on the first table.

During:

- At the first table with the cut-open fruit, allow a few minutes for the students to observe the fruit. Have each student take notes in a notebook on the different attributes of the seeds in the fruit.
- At the second table the students will go to each station and identify the fruit to which the seed belongs, based on the observations in their notebook.

After:

Lead a discussion about the techniques that archaeologists use to identify seeds.

- How might archaeologists identify seeds?
- What tools might they use?
- Do you think these same techniques and tools will work to identify pollen?
- If not, what tools might be used?

What did you discover?

Have youth write a paragraph about their observations and speculate what kinds of foods these people were eating. How might they have prepared the food?