

Mapping and Excavating a Jello Mold

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Lesson Overview: Children will learn how archeologists excavate sites by doing their own excavation on a jello mold.

Objectives: Students will

1. Use a grid to map objects in a jello mold
2. Look at three layers of jello to understand stratigraphy in archeology

Texas Essential Knowledge and Skills (TEKS)

Social Studies, Grade 5

- Social Studies 113.7(6B), translate geographic data
- Social Studies 113.7 (25A), locate, and use primary and secondary sources
- Social Studies 113.7 (25F), use appropriate mathematical skills to interpret social studies information

Mathematics Grade 5

1. Mathematics 111.17 (11A), measure to solve problems
2. Mathematics 111.17 (14D), use tools to solve problems

Materials: 3 sheets of grid paper for each group, 1 clear bowl of jello for each group with three different color layers with fruit or other objects embedded in it, extra bowls or buckets, and spoons. A good idea for fruit may be to have fresh grapes on the top layer, older grapes in the middle layer, and raisins in the bottom layer to show that older objects are often found deeper in the ground.

Activity:

Step 1: Teacher will prepare the three-layer jello before the class

Step 2: Split students into groups of three, 1 recorder, 1 person to excavate, and 1 mapper.

Step 3: Hand out 3 sheets of the grid paper to each group.

Step 4: Have students map the three layers of jello. Draw in each grape, raisin, or other object on the grid paper layer by layer. They will need to carefully remove each layer after they have finished mapping it so that they can access the next layer.

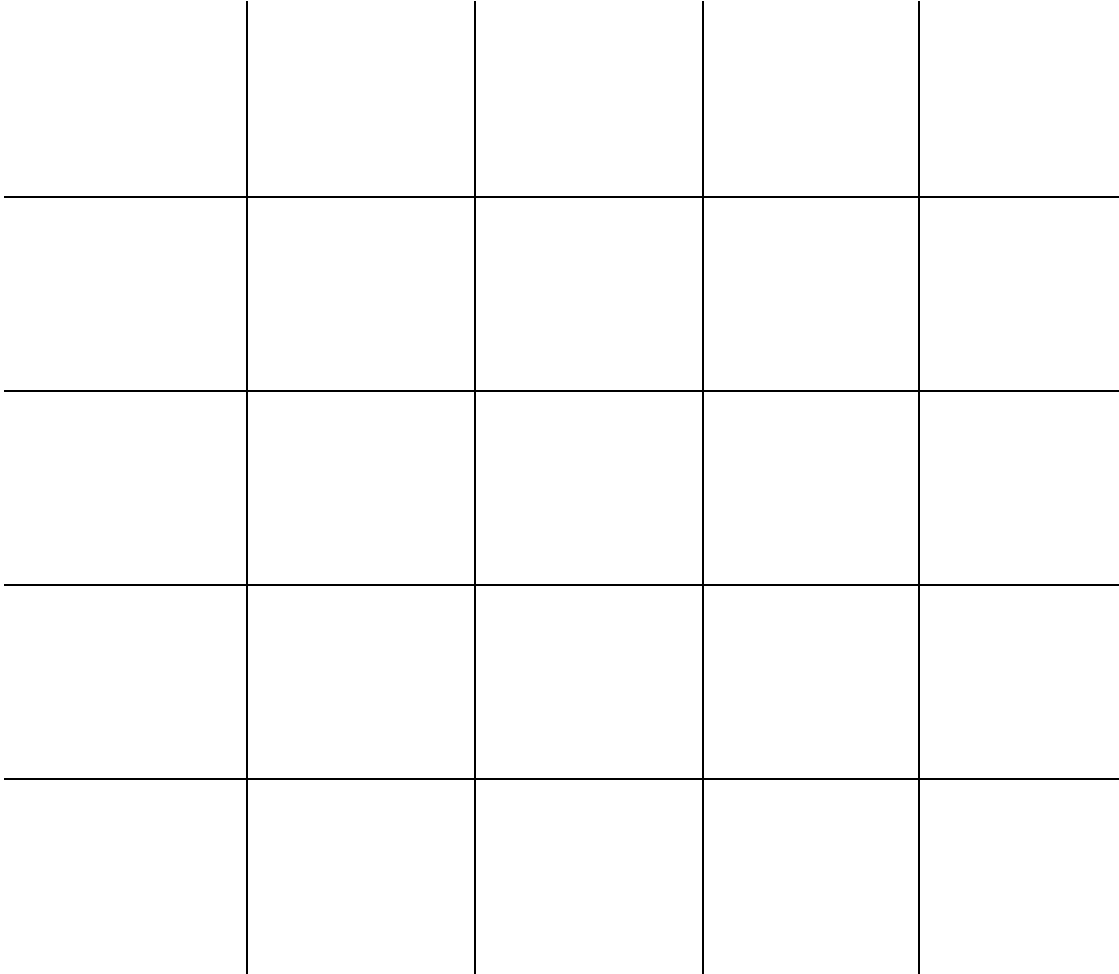
Step 5: Have students remove the items (grapes, etc.) from each layer of jello and write down their findings at the bottom of the grid paper.

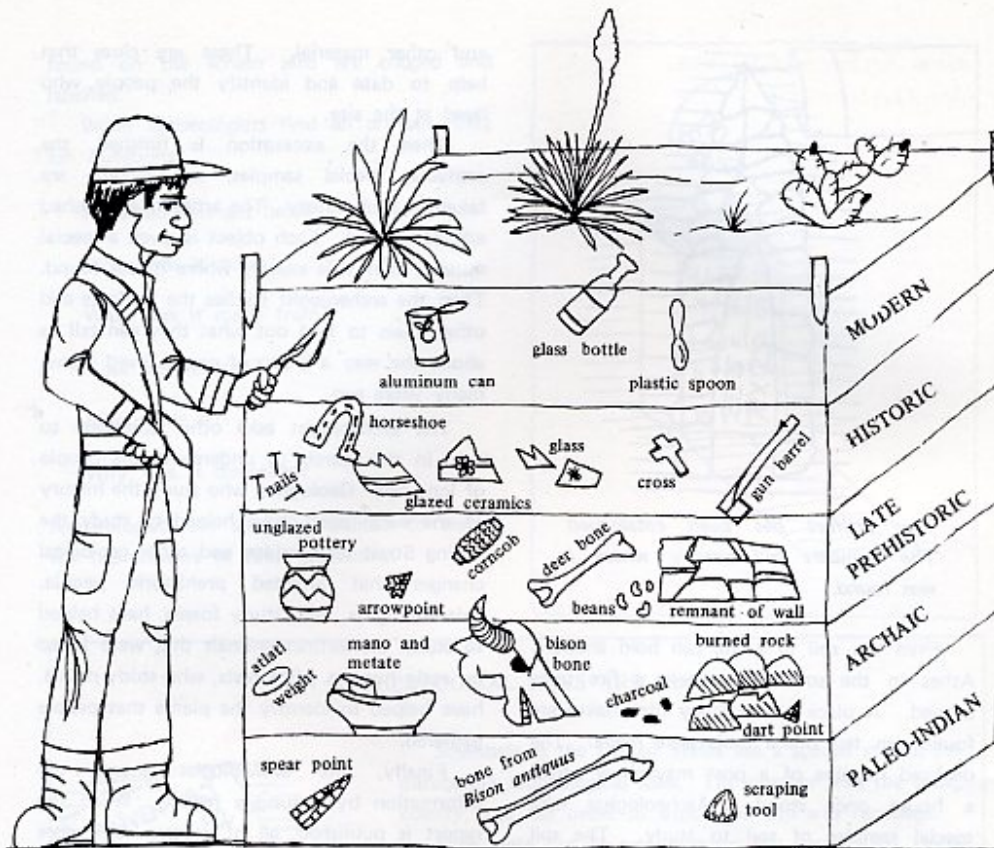
Step 6: Have each group share a portion of its findings with the class.

Closure: Explain to the class the similarities and differences between this exercise and a real archeology excavation. If the grape/raisin example was used and no group figured out the relationship between the aging grape and archeology this would be a good time to explain it.

Extension: Have students read the “An Imaginary Archeological Site” handout and answer the questions on it.

Grid Paper





AN IMAGINARY ARCHEOLOGICAL SITE

There are a few archeological sites in Texas where people have left cultural remains from Paleo-Indian times through the Historic period. In the imaginary site shown here, the layers of soil contain remains from all time periods. A site like this can help us understand the differences between cultures in different time periods.

As you look at the layers, remember that some things used by early people were also

used by later people. The same kinds of cultural materials may be found in strata (layers of earth) from different periods. For example, burned rock from a hearth, which is shown here in the Archaic, could also be found among Late Prehistoric and Historic Indian cultural remains—or even at a modern picnicking site. That is why it is so important to study artifacts in association.

(Image courtesy of the Office of the State Archeologist, Texas Historical Commission, Living with the Texas Past Series, No.1, 1983 ; Robert J. Mallouf, Series Editor.)

Why are the oldest artifacts at the bottom of the archeological site?

If future archeologists excavated your schoolyard, name 5 things they might find.