What Will Survive?

Shelby Brown
The Archer School for Girls
Los Angeles, California

Goals/Grade Levels
How well archaeological remains survive is strongly affected by the materials they are made of and the environment in which they may lie for centuries before being discovered. Students will evaluate their classrooms and homes and decide which items may last hundreds of years into the future and which may be lost. This lesson teaches that there are always holes in the material record, and to fill them we make hypotheses about the past. Students consider the difference between observation and inference and the ways in which historians and archaeologists may be led astray in their interpretations.

Cultural/Historical Context
Organic remains are susceptible to decay and are affected by humidity and air. (This is the reason time capsules need to be airtight and dry.) Organic remains generally undergo significant decay within a fairly short time unless they are preserved in special conditions. At most sites, fragile artifacts and organic remains are lost to us forever. Inorganic remains survive better, although they too can rust, tarnish, or otherwise break down in unstable conditions. Sometimes it is amazing that anything survives at all! Only if a site is covered over and sealed quickly, as Pompeii was by volcanic ash, may both organic and inorganic remains survive.

- Organic (once living) remains survive well only if protected (by hot/dry, airless, waterlogged, and very cold or frozen environments, or if sealed in volcanic ash). Organic remains turn to dirt easily. Examples of organic remains include human, animal, and plant remains and objects and features made of plants and animals (food, paper, wood, leather).
- Inorganic (never living) remains survive well in relatively airless conditions, although they too can break down when exposed to the elements. Examples of inorganic remains include clay, stone, cement, plastic, glass, and metal.

Time Needed
This mini-lesson can be used as part of an introduction to a simulated dig or the AIA Mystery Cemetery, or function alone as an exercise in thinking about the kinds of evidence historians and archaeologists use to interpret the past. Excluding the time students may spend looking at material remains in their homes, the teacher’s presentation and class discussion should take no more than about 45 minutes.

Required Materials, Tools, and Preparation
The teacher may wish to place particular organic and inorganic objects around the classroom before the discussion begins. Otherwise, no preparation is needed.

Classroom Process
The teacher presents and students discuss or review the properties of organic (living or once living) and inorganic (never living) remains:
- Organic remains include people, plants, animals, and anything made of plant or animal matter. These will tend to decay unless preserved in an airtight environment.
- Inorganic remains include stone, metal, clay cement, plastic, and glass. These were never living and will not rot or decay the way organic remains do. They survive especially well in an airtight environment.

The teacher should ask students to look around the classroom and list the things (and people) that are organic and those that are inorganic. What might survive in 1,000 years – without a volcanic eruption to cover the site – to say anything about us to the archaeologists of the future? A binder may have metal rings and a plastic body, but the paper and the writing on it will be long gone. Leather shoes will decay. Parts of synthetic shoes may survive, but not the laces. A lunch box may survive, but not the lunch – although a plastic container might preserve a dried residue of former food. A computer or a movie screen may survive, but will cease to work. Skeletons may survive, but not the clothes or skin on them.

Given what will (perhaps) last and be lost in the classroom, what kinds of conclusions may future archaeologists draw about us? Where might they go completely off track? What would students like them to know about the class or the school? Will students’ names survive into the future – especially if computer disks are not functioning? Does anyone have a metal bracelet inscribed with a name? Will brand names be misunderstood as people’s names in the future?

Assessment
- Make a list of the furniture and objects in a room at home. Carefully note whether each object is organic, inorganic, or has elements of both media.
- Assume 1,000 years have passed, and the room has not been specially preserved. List what will be left after all the organic materials decay.
Summarize what you think an archaeologist in the future will be able to say about your room, your family, and you as an individual. Will your name survive? Will your taste in colors or music or books survive? Will the archaeologist know for certain what your gender or age is?

After discussing the results in class, end with a discussion of what artifacts of theirs the students wish would survive to provide information for future archaeologists.

RESOURCES