**What is Archaeology?** Archeology is the scientific study of past cultures and the way people lived based on the things they left behind.

**What is an Archeologist?** Archeologists study the past by examining objects that people have left behind. They ask questions like: Who lived in this place? When did they live? What were they like? The job of an archaeologist is a great deal like the job of a detective.

Let’s make sure you have some of the “tools” of their trade before we begin our own exploration.

**Fossils/Artifacts:** What is the difference between an artifact and a fossil?

1. **Fossils** are remains of living things (plants, animals, people), not of things that were made.
2. **Artifacts** are remains of things that were made, not the remains of living things.

**What is a site?** A "site" is a place archaeologists wish to explore. At the site, archaeologists literally dig, looking for the remains of ancient civilizations. That is why they call the site at which they are working a “dig”.

**How do archaeologists find sites to explore?** They think about…

1. What people need to stay alive: access to clean drinking water, protected place to live, access to trade routes.
2. They check out reports of artifacts that have been discovered. Artifacts have been discovered by farmers and construction companies while working at their jobs.
3. Other places are discovered using scientific instruments like radar and sonar to look for ruins.

**Before they dig…** An archaeologist must receive permission to explore a site. The owner of the land / government must grant permission. Once permission is received, archaeologists will work in teams exploring the area and they look for evidence: fossils and artifacts.

**How do they dig?** Before they begin digging, archaeologists design a grid on the ground using rope and string. Each square in the grid must be carefully searched. A record must be kept of anything found,

including what was found next to it. Digging at a site is slow and careful work.

**What tools do they use?** The tools of the trade include:

- trowels, brushes, spoons, dental picks, sieves, saws, dust pans, wheel barrows.

**How do they interpret their findings?** Once objects are labeled and removed from a site, they are taken to a lab where the detectives (the archeologists) examine it to decide what it is, what materials were used to create the object, and how it was used.

* organize artifacts into groups based on similarities
* compare objects in relation to other objects
* look for evidence of changes over a period of time
* date once-living objects by measuring *carbon-14* levels
* use microscopic and biological tests to date objects