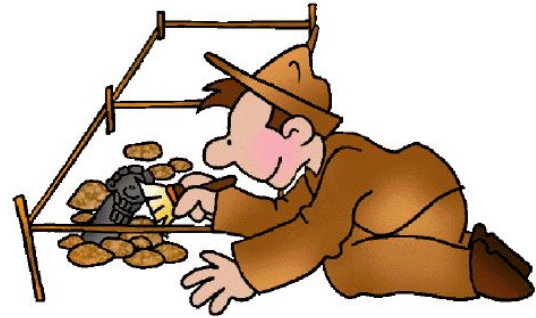


Archaeologists & Archaeology

Archaeologists are scientists who collect and study the remains of past human activity. They work alongside other scientists to figure out what life was like for ancient peoples and to piece together history. Ultimately, they have to solve mysteries of what happened in the past using evidence to support their **hypothesis** (guess based on evidence) and **conclusions**.



Evidence archaeologists find is called an **artifact**.

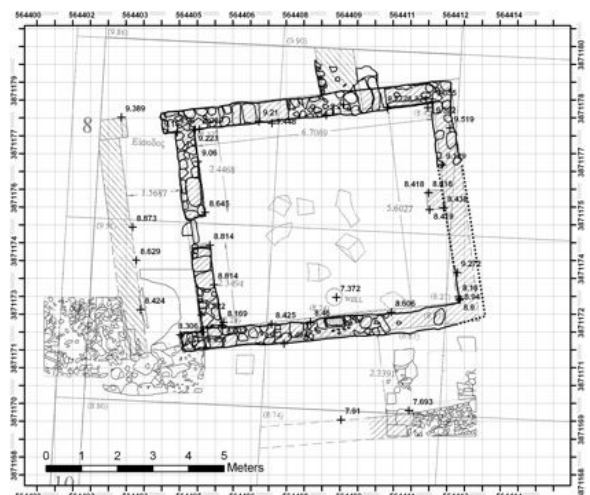
Examples of artifacts are pottery, stone tools, bones, building sites, etc. They can also use technology to analyze evidence of sites/closed artefacts (X-rays and satellite images).

To think like an archaeologist, you would have to start by analysing an artefact and making the initial guess, or hypothesis, as to its purpose/significance. Then, tests and searching for additional evidence is completed to prove the interpretation right or wrong.



Most evidence for archaeologists is found in the ground. An **excavation, or dig**, is what archaeologists carry out to find this evidence. It must be done very carefully to not overlook or destroy evidence. Archaeologists look at layers where the soil has a different texture, colour, or chemical make-up. Each layer shows a different time range where different environmental factors or human activities influenced the soil.

Archeologists keep track of everything and take very detailed notes on what they find and where it is located. They also map out excavation sites to help piece together a larger story.



Some **techniques** archaeologists use to figure out more information are:

- **Comparison** - comparing finds with similar objects found at other sites
- **Statistical analysis** - make accurate counts of various types of remains (ex. A large # of gazelle bones might indicate the people who lived at the site liked eating gazelle)
- **Chemical analysis** - use a variety of chemical analysis forms to find out the chemical makeup of artifacts. (ex. A high level of lead in body tissue could indicate the person died of lead poisoning)
- **Carbon 14 dating** - measures the amount of carbon-14 in an object. Because the amount of carbon-14 decreases over time, scientists can tell when something died
- **Remote sensing** - satellites with special equipment measure the light reflecting off earth's surface. This allows archaeologists to identify previously hidden ancient roads, fields, and buildings.