

What is Stratigraphy?

An archaeological site has many layers. The ground beneath us is like a stack of pancakes. Layers of soil build up over time, each with its own color and texture. Studying the different layers of soil is called **stratigraphy**.

An archaeologist will slowly dig down through these layers of soil to look for artifacts. As a rule, the deeper they dig, the farther back in time they go.

The photo to the left shows the different layers of soil at Fort Vancouver. What do you notice about how the soil changes as you dig deeper?



Words to Know

Archaeologist: A scientist who digs to find artifacts under ground. Archaeologists do not look for dinosaurs. Archaeologists look for things that humans made or used.

Stratigraphy: Stratigraphy is the study of layers of soil.

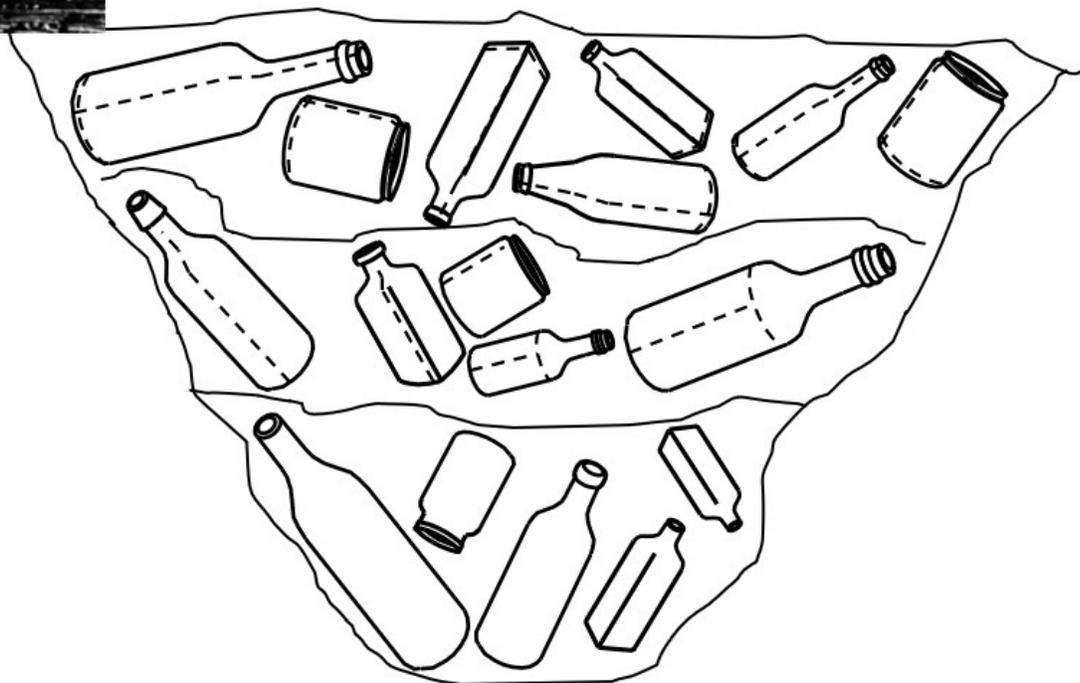
Archaeological site: An archaeological site is a place that an archaeologist studies. It might be a place where people once lived or passed through.

Artifact: While they dig at archaeological sites, archaeologists find artifacts. These are objects that were used or made by people that were buried underground. They may be things that were lost or thrown away.

Trash pit: In the past, people used to dig holes in the ground to throw away their garbage. When an archaeologist finds a trash pit, they may find lots of artifacts!

Mold: A mold is a hollow container used to give shape to melted glass in order to make a bottle.

Seam: A seam appears at the place where two parts of a mold connect.



This picture shows what a trash pit containing bottles next to a house might look like.

Which layer is the oldest?

Which is the most recent?

Do you notice anything that changes on the bottles between the layers?

How have bottles changed through time?

At Fort Vancouver, archaeologists find some artifacts that are familiar to us because they are similar to what we use today. One such artifact is glass bottles and jars used to hold beverages, medicine, and food. Broken medicine bottles might be found near the fort's hospital. Beverage bottles and food jars are often found near places where houses were once located.

From written documents and photographs, we know how glass bottles were made through history. One clue on bottles that tells archaeologists when the bottle was made is the location of seam lines.

The first bottles were made by hand. A glass maker would shape a blown glass bubble with tools to make it into a bottle shape. There are no "seam" lines on these bottles.



Blown glass bottles with no seams.

Later, bottles were made by blowing melted glass into a mold. Bottle makers started making bottles this way in the 1800s. These bottles have "seam" lines that formed where the mold parts came together (represented on the bottle drawings as a dashed line).

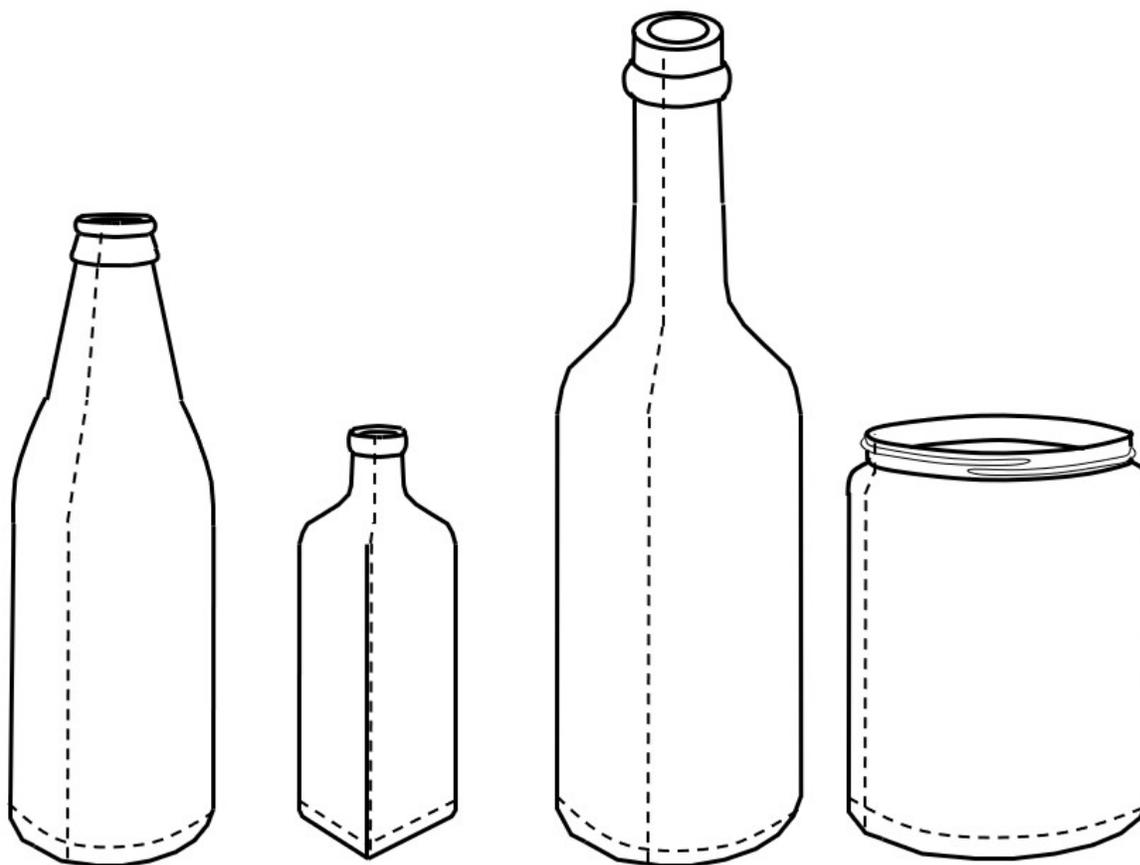
The tops of the bottles do not have seam lines because the molds did not go all the way to the top of the bottle.



Bottles made in molds. The seams (dotted lines) were made where the mold pieces met.

In the 1900s, bottles were made by machines. The seams on machine made bottles go all the way to the top of the bottle because the mold formed the entire shape of the bottle.

See if you can find glass bottles in your house. Do they have seams? Do the seams go all the way to the top? What does the seam tell you about when the bottle was made?



Machine made bottles. The seams (dotted lines) go all the way to the top of the bottle.

Stratigraphy Challenge!

Based on what you know now about stratigraphy and the way bottles were made at different periods in time, try your hand at this stratigraphy challenge!

Print these pages and cut out each rectangular "layer." Place the layers in the order you would find them in the ground, like assembling a puzzle.

Download the answer key for this activity at www.nps.gov/fova/fovafromhome.htm

