

How Sweet It Was: The Sugar Trade in Alexandria

What is a sugar house?

PURPOSE

A hands-on experience with actual artifacts, this lesson reinforces the importance of background research and primary sources in archaeology and teaches students classification skills.

LEARNING OBJECTIVES

The Student will

- discriminate between two types of ceramics: syrup jars and sugar molds.
- describe three to four characteristic traits of each artifact.
- distinguish between three different parts of sugar making ceramics, rims, bodies and tips/bases.
- sequence flash cards describing the sugar refining process.
- create an "advertisement" applying information learned on sugar manufacture.

SYNOPSIS

When the City archaeologists in Alexandria uncovered hundreds of earthenware pottery sherds at the Sugar House Site, they had to similarly uncover the artifacts' function. Researching documents and old prints shed light on the antiquated sugar refining process used here in Alexandria in the 1800s. Your students will be led through the step-by-step process that the City archaeologists followed to research, excavate and analyze the Sugar House Site. Then they will have the opportunity to take part in a step of the laboratory process.

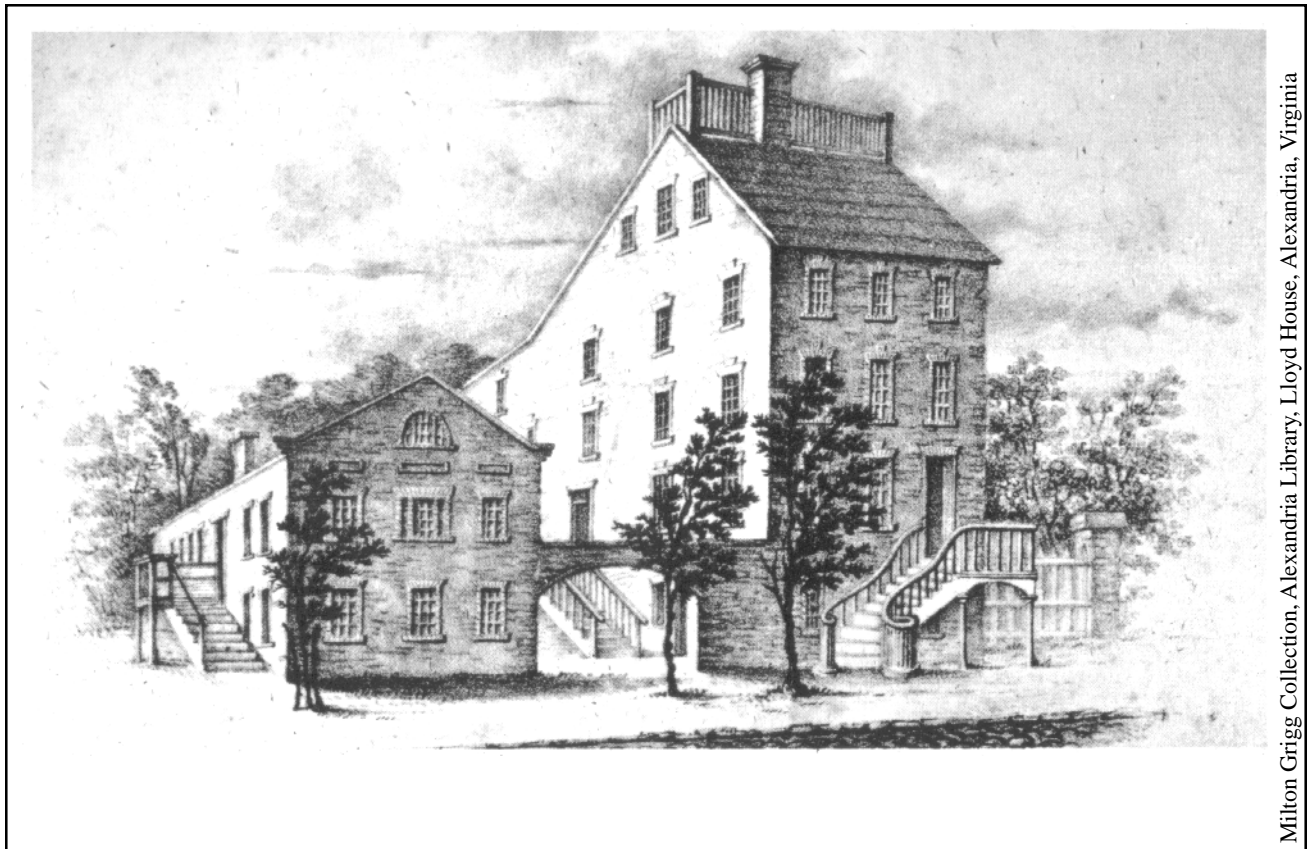
Each student will be given a set of ceramic artifacts from the sugar refining process to classify during the lesson. Sorting the artifacts into different functional categories furthers students' understanding of artifact form and function, and ultimately, the process of refining the sugar. Students will then have an opportunity to relate this to their own use of sugar today through discussion and the creation of an "advertisement" for the sale of sugar.

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BACKGROUND INFORMATION

Alexandria Archaeology excavated a sugar refinery during the 1987, 1988, 1989 and 1992 field seasons. It was one of two refineries that operated in Alexandria during the early nineteenth century. The refinery excavated by Alexandria Archaeology was located on the 100 block of North Alfred Street near the corner of Cameron Street. It operated from 1804 to 1828.

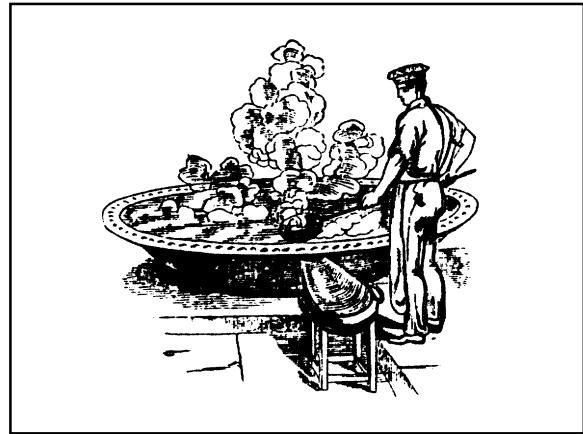
The City archaeologists study artifacts to learn about how people lived and worked long ago. Occasionally, artifacts that do not have a modern counterpart in style or function are found on archaeological sites. This was the case when hundreds of earthenware pottery sherds were uncovered on the Sugar House Site. These artifacts were the ceramic sugar molds and syrup jars used in the refining process. Sugar refining has changed since the nineteenth century. The pottery used by the two refineries in Alexandria nearly two hundred years ago belonged to an antiquated technology.



The City Archaeologists also look for written and graphic resources that provide more information about how the artifacts were used. The archaeologists and volunteers investigated documents that provided insight into how an early refinery operated and discovered prints of how the sugar pottery was produced and used. The

1805 Mutual Assurance (fire insurance) records for the property show a sketch for “A sugar house 5 stories high covered with slate.” According to the 1820 Census of Manufacturers, about 500 boxes of “Havana Sugar,” valued at \$20,000, were used annually in the production of sugar. Labor was provided by seven slaves, five men and two boys, using “one pan, one cooler, and one cistern and about five thousand molds, and the same quantity of pots.” Sugar production was based on slave labor. Slaves were used to grow, harvest and process the sugar cane in the Caribbean. The raw sugar was then shipped to refineries in America and Europe. In Alexandria, and in other southern American cities where sugar was refined, slaves toiled to produce white sugar loaves and molasses in oppressively hot, dangerous working conditions.

The refineries in Alexandria imported muscovado, a crude, raw sugar that is grainy brown and full of impurities. The muscovado (from the Spanish “mas acabado” meaning more processed) was rolled to the sugar refinery in a barrel or hogshead. It was boiled in huge vats with lots of water. Bull's blood and egg whites were added to the boiling mixture to help bring impurities to the surface for skimming. The cooled sugar was poured into cone-shaped unglazed earthenware molds. The filled molds were placed on large earthenware jars that were glazed on the inside. The molasses filtered down through the sugar as it hardened and trickled out of the sugar into the jars. After several days the sugar was removed from the molds and left to dry. This process was repeated several times until the sugar was purified. The loaves of refined white sugar were then wrapped in blue paper and sold.



The Penny Magazine, (London) vol. 10, 1841.

Refined white sugar was very expensive in the eighteenth and early nineteenth centuries. Those who could afford white sugar used it on special occasions. Other sweeteners such as honey, molasses and the lower grades of brown sugar were used more frequently.

sep 18	KERR & McLEAN.		
e	JAVA COFFEE, LOAF & CRUSHED SUGAR.		e
t,		25 bags pure Java	
1/2		Coffee; 2500 lbs.	
n		Refined Sugars;	
1-		2000 lbs. Crushed	
	Sugars; 2 casks Sugar House Treacle; 25 boxes		
	Poland Starch, and 15 boxes Chewing Tobacco,		
e	just received and for sale by		
d	sep 18	KERR & McLEAN.	
18			

Typical ad from the Alexandria Gazette, 1820's

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VOCABULARY (See Appendix I: Glossary, for more words and definitions)

- *Archaeology*—The scientific study of the human past through excavation and related research.
- *Archaeologist*—A person who specializes in the study of material remains of past human life and activities.
- *Artifact*—An object made or modified by people.
- *Glaze*—A glassy, shiny coating on pottery.
- *Manufacture*—The act of making a raw material into a finished product
- *Molasses*—Thick, dark syrup produced during the refining of sugar, used as a sweetener.
- *Mold*—A hollow form used to give shape to something; the pottery form used to shape a sugar loaf.
- *Muscovado*—Unrefined or raw sugar obtained from the juice of sugar cane.
- *Pottery*—Objects made from clay.
- *Refinery*—An industrial factory for purifying a raw substance, such as sugar or petroleum.
- *Sherd or Shard*—A fragment of pottery or glass.
- *Sugar House*—A sugar refinery or processing plant.
- *Sugar Loaf*—A large cone-shaped loaf of pure, refined sugar.

DISCUSSION TOPICS

Docents will discuss these topics with your students

- Would you like to work in a sugar refinery? Why or why not?
- What are your favorite foods? Do they contain sugar?
- Is sugar as valuable today as it was in Alexandria in the 1800s? Could you have eaten as much sugar then as you eat today?

NAME: _____

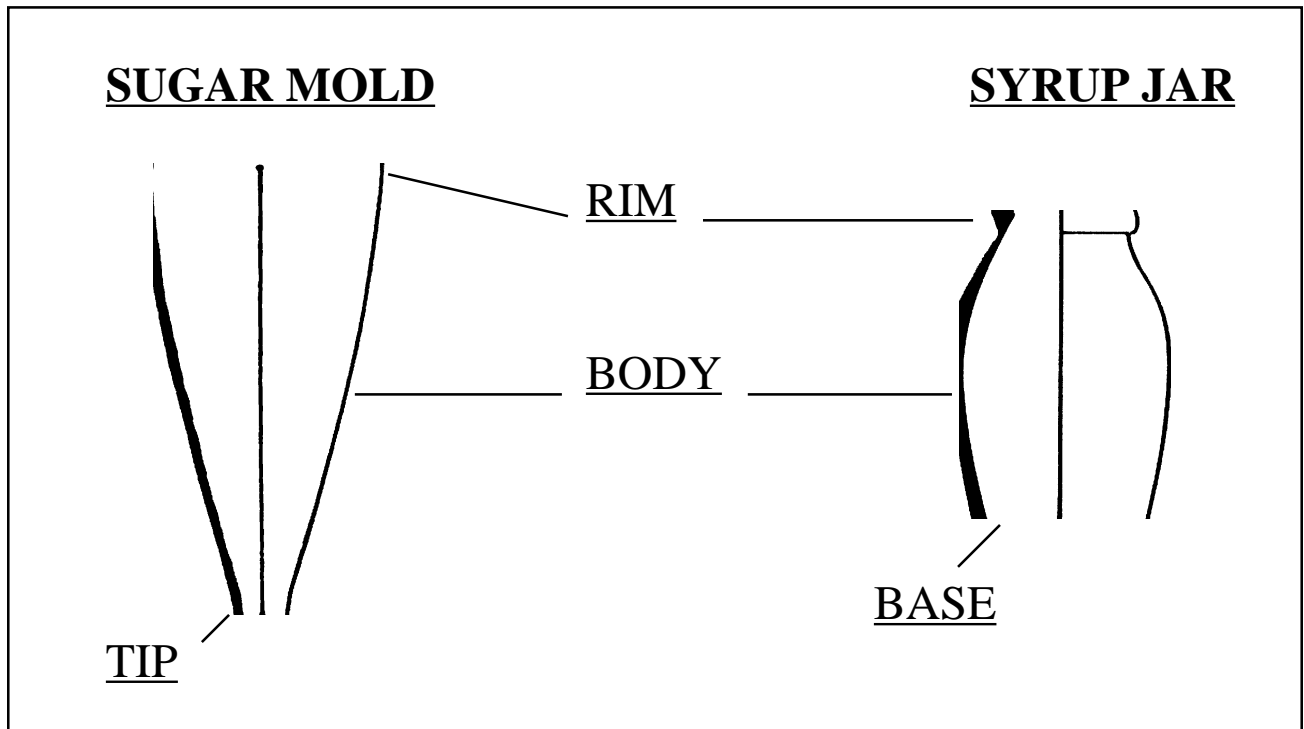
SUGAR HOUSE LESSON

I. SORT the SHERDS

Look at your sherds. Then sort them into two groups: syrup jars and sugar molds.

II. PARTS of the WHOLE

Sketch each one of your sherds on the diagrams below.



Why are syrup jars glazed?

Why are sugar molds unglazed?

III. PUTTING IT ALL TOGETHER

If you had the job of making sugar in the 1800s, how would you do it? Put the cards in order and then number the sentences below in order.

_____ The hot liquid is poured into the **sugar mold**.

_____ Muscovado is boiled with bull's blood.

_____ Syrup drips from the mold into the **syrup jar**.

_____ Tongs are used to serve sugar at a tea party.

_____ Hogsheads of muscovado are rolled to the Sugar House.

_____ Cones of sugar are wrapped in blue paper.

_____ A ship arrives on the Waterfront in Alexandria.

IV. LET THE COMPETITION BEWARE

You are the proud owner of a sugar refinery in Alexandria in the 1800s. Design an awesome ad to sell your products, then draw it on the page.

REAL AD

Public Vendue.

On Saturday next will be sold at the Vendue-Store,
opposite Col. Hooe's dwelling-house,

A Variety of Merchandise as usual.

Also, will be sold at the same place at 10 o'clock
in the forenoon of the same day, for the
benefit of the underwriters,

A quantity of

LOAF SUGAR

In small lots,

P. MARSTELLER, Vendue-Master.

Alexandria June 28, 1787.

PLAN YOUR AD

What does a good ad need to say?

1. _____
2. _____
3. _____
4. _____
5. _____

NAME: _____

SUGAR HOUSE LESSON

