

## WHERE SCIENCE HISTORY AND ART CONNECT

To: Raven Hill Friends

From: Cheri

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Re: Whistles

Whistles invite you to explore sound, vibration, and the science of how air becomes music. Whistles connect the physics of sound waves, the history of ancient communication & musical instruments, as well as the art of design & decoration. Whistles are simple tools anyone can make or play with some practice.

The process is complicated in some ways, yet simple in others. During the recent Raku Clay Whistle Workshop, participants learned new techniques as they created their first clay whistle. The Raku Clay Whistle process includes the following steps:

Mexican clay whistle



Checking whistle holes



Clay lipstick!



1. Start by making a clay balloon from two bowl-shaped pinch pots connected at the two rims by scoring and applying a wet clay slip as a "glue."

2. The whistle part is a bit more complicated and requires great care to create a blowhole and air exit hole with a sharp angle on the top and lower inside of the air exit hole, which splits the air and creates the whistling sound. Sometimes a finger hole is added to change the pitch.

3. Once the basic whistle is complete, the fun begins and each whistle becomes its own person or critter with the addition of eyes, nose, mouth, ears or whatever one's mind can imagine! Among the whistles made in the August 2025 class were a cat, dragon, fantasy being, fish, gnome, snake, unicorn and whippet.

4. The whistles must be able to whistle before they dry and are bisque fired. That means you need to test your whistle from time to time to make sure it works during the sculpting process. You WILL end up with clay lipstick!

Ready to bisque fire



Bisque whistles



Glazing the whistles



5. The finished whistle is then air-dried completely to eliminate any possible explosions from trapped water or air pockets.
6. A bisque fire follows where the raw clay pieces must be slowly heated to 1700 degrees Fahrenheit over a period of 12 hours.
7. Each piece is then glazed for color.
8. The glaze firing takes the whistles to approximately 1800 degrees Fahrenheit in about 3 hours.
9. The raku process is a Japanese firing method and was used to finish the whistles. The glaze melts at 1800 degrees Fahrenheit.
10. At that point, the whistles are removed from the kiln using tongs and placed into cans with straw in them and covered so the smoke penetrates into the unglazed and glazed parts adding to the overall design.

When exploring the Art and Spirituality of Japanese Pottery, Matthew Davy says, "The essence of Raku lies in its unpredictability and the acceptance of imperfection. Each piece embodies the philosophy of 'happiness in the accident,' where the final outcome is left to chance and the unique conditions of each firing."

Raven Hill would like to extend a big thanks to the Baiardi Family Foundation for funding the purchase of a new ceramic kiln and to Sally Brayton, who taught the Clay Whistle Class. We hope to have Sally back again soon!

Cheri

Testing the whistle



Glaze firing



Raku—smoke & fire



The final product

