

1046-J1-2021      **Michelle Krolkowski\*** (jkrolkowski0713@lions.piedmont.edu) and **Elizabeth C Rogers** (brogers@piedmont.edu), 4733 Highland Road, Gainesville, GA 30506. *Mathematics of Southern Appalachian Folk Pottery*.

Folk pottery from the southern Appalachian area of the United States is rich in history, practical application and mathematics. Although the mathematics is not explicitly stated in any reference book, it is interwoven into almost every step of the process from the production of the potter's wheel to the importance of measurement and time. The finished products exhibit various symmetries and geometric transformations. As each facet of this art form is explored, the mathematics involved will concurrently be explored and explained. On completion of this journey, one will understand why folk pottery is highly valued by collectors and museums for its significant historical relevance, its beauty and uniqueness as well as its mathematical implications. (Received September 16, 2008)