

1096-01-100

**Janet E Barber\*** (barbe2je@cmich.edu), 301 Largo Road, Largo, MD 20774, and **Asamoah Nkwanta**. *Benjamin Banneker's Original Handwritten Document: Observations and Study of the Cicada*.

“Benjamin Banneker and his Romance with the Cicada: A Social Science-STEAM Connection” is a presentation extracted from the above titled paper. The “A” will be added to STEM here as an artistic and social science delivery in explanation of Benjamin Banneker’s fascination with and his research and study of the cicada. Banneker was an African-American mathematician, astronomer, farmer, and scientist. A previously unpublished handwritten document by Banneker, mathematical models involving the periodic cycle and behavior of the cicada, and stories of the scientist behind the science will be discussed and shared in this talk. Banneker is known for his mathematical puzzles, ephemeris calculations, almanacs, creation of a wooden clock, land surveying, and a famous letter on human rights written to the 3rd U.S. President, Thomas Jefferson. Though Benjamin Banneker is among the first American scientists to document and record chronological information of the seventeen-year cycle of the periodic Magicicada – Brood X, also known as the Tibicina Septendecim cicada, his observations of the cicadas are much less known, taught, and publicized. (Received July 28, 2013)