

# Banneker's Mathematical Mentors

Many famous mathematicians obtain their passion for math through the inspiration and support of mentors. It was obvious that Benjamin Banneker already had that interest since he preferred books to playtime. However, as he reached adulthood there were several influences that lead him into the specific fields of mathematics that he pursued.

**The first person to help shape Banneker's love for math was Josef Levi:**

-Josef gave Benjamin the watch he had patented, so the young mathematician could take it apart in order to “study its workings.”

-Banneker then carved similar watch pieces out of wood. By using calculations to figure out the proper number of teeth needed for each gear and the relationships between the gears, he created, in 1752, a wooden clock, which kept perfect time for nearly 50 years.

-He then returned the borrowed watch to Levi fully functional

**The second person to lend his skill to Banneker in his quest for knowledge was Joseph Ellicott:**

-Joseph was an amateur mathematician and astronomer who took Benjamin under his wing. He would lend Banneker books on these two fascinating subjects.

-Using these books, Banneker taught himself astronomy and advanced mathematics, which led him to successfully predict the solar eclipse on April 14, 1789, contradicting the forecasts of prominent mathematicians and astronomers of the day.

-Also using these books, Banneker taught himself the Algebra, Geometry, Logarithms, Trigonometry, and Astronomy needed to become an astronomer.

-Joseph also lent Banneker tools such as a compass, sector, etc. which Benjamin learned to use on his own.

### **The third person to help Benjamin out was Major Andrew Ellicott, Joseph's brother:**

-At the age of 60, Banneker was appointed to a three-man team of surveyors headed by the Major.

-These two men worked closely with Pierre L'Enfant, the architect in charge. However, L'Enfant was discharged of the position because of his temper. Problems arose when he took the plans for the future Capitol with him.

-Banneker proved his worth by recreating the plans, including street blocks, parks, and the placement of buildings over the course of two days.