

**Benjamin Banneker, a scientist and mathematician, was an activist for civil rights and a gifted writer. In some of his writings we saw beautifully written mathematical riddles in verse. Even though Banneker was a self-taught man, the mathematics in his riddles were not simple but were innovative, intriguing and quite complex.**

## **The puzzle of the Cooper and the Vintner**

*A cooper and vintner sat down for a talk, Both being so groggy that neither could walk;  
Says cooper to vintner, "I'm the first of my trade,  
There's no kind of vessel but what I have made,  
And of any shape, sir, just what you will,  
And of any size, sir, from a tun to a gill."  
"Then," says the vintner, "you're the man for me.  
Make me a vessel, if we can agree.  
The top and the bottom diameter define,  
To bear that proportion as fifteen to nine,  
Thirty-five inches are just what I crave,  
No more and no less in the depth will I have;  
Just thirty-nine gallons this vessel must hold,  
Then I will reward you with silver or gold, --  
Give me your promise, my honest old friend."  
"I'll make it tomorrow, that you may depend!"  
So, the next day, the cooper, his work to discharge,  
Soon, made the new vessel, but made it too large:  
He took out some staves, which made it too small,  
And then cursed the vessel, the vintner, and all.  
He beat on his breast, "By the powers" he swore  
He never would work at his trade any more.  
Now, my worthy friend, find out if you can,  
The vessel's dimensions, and comfort the man!*



### **Poem-Riddle Instructions**

Your activity will be to write a riddle worthy of the Benjamin Banneker name. The length should be no more than one page.

The riddle-poem will be graded on the four major attributes below:

- Grade level Content- should be on grade level**
- Innovative thinking**
- Multiple ways to possibly solve -i.e. Graph, equation, diagram, table**
- Written/Grammar – it should be written in a creative manner**