

**Math Grades 7 – 9**  
**Volume**  
**Reading Level: 9.4**

MA.7.G.5.1  
MA .912.G.7.7

***The Essential Writings of Ralph Waldo Emerson***

“History”

Ralph Waldo Emerson

**Activity:**

1. There is mention of a sphere in the reading. If Mr. Emerson is referring to the earth, with radius is 6, 378.1 kilometers, calculate the volume of the earth.
2. If the ratio of the radii of two spheres is 1 to 2, what is the ratio of the two volumes?
3. Find the surface area of the earth.
4. If the radius of a sphere is tripled, how is the surface area affected?