

Lindsey Wagner
M&M Madness

Haven't you ever wanted to know exactly how much M&M's you ate? In this experiment, I will find the exact volume of a single M&M. With these formulas you can find the volume of about anything that is round. Everyday shapes use geometry to calculate the properties of the object. Knowing how to use geometry will help you find the volume of an unknown object. People use geometry in their everyday lives. The purpose for my experiment is to find a formula that will work with all round objects. I predict that the displacement volume of a M&M is 1mL. For this experiment you need, one package of M&M's, metric ruler, beaker, water, and clay or tape. Some of the formulas that I used were $M\&M's\ Long\ Side/10=Long\ Diameter$, $Long\ Diameter/2=Long\ Radius$, $M\&M's\ Short\ Side/10=Short\ Diameter$, $Short\ Diameter/2=Short\ Radius$, $Second\ Volume - First\ Volume=Volume\ of\ 10\ M\&M's$, and $Volume\ of\ 10\ M\&M's/10=Displacement\ Volume$. My hypothesis was incorrect because I thought the displacement volume was 1 mL. The actual displacement volume was 0.6 mL. The sphere using the long radius is 1.15 cubic cm. The sphere using the short radius is 0.00014 cubic cm. If I do this experiment again I will try using different types of candy.