

1077-I1-1440 **Paul C Fonstad*** (pfonstad@gmail.com). *The Volume and Surface Area of a Toy Train.*

While discussing the formulas for volume and surface area of different basic solids, students rarely get a chance to see situations where the formulas can be applied to a more complicated, real world scenario. This talk will focus on a lesson plan created for use in a Geometry for P-8 Teachers class that uses the idea of modeling a toy train to show students real world applications of volume and surface area formulas. To encourage higher level thinking, the activity requires the students to discover first-hand the limitations of the formulas and to come up with creative ways to apply their prior math knowledge in problem solving. (Received September 19, 2011)