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Is Your Kindergartener's Classroom Safe?

This project intends to determine the amount of lead in an average kindergarten classroom. Kindergarteners don't have power over the materials used in their classrooms. What danger is a kindergartener in if they chew on a pencil? The investigation consisted of two tests. The first test involved a survey, and the second test consisted of actual lead testing. The survey was a tally of which supply and how many times kindergarteners put school supplies into their mouths. The survey was taken over several days at different times. The supplies with the most tallies were tested for lead content. Pencils and other objects very common in the classroom were tested. A Lead Inspector Kit was used. The active ingredient in the solution is sodium sulphide. This chemical, mixed with water reacts with lead causing a yellow, brown, or black color dependent on the amount of lead present. Pencils, wooden blocks, and plastic buttons were the supplies most frequently put into mouths. Twenty-two common classroom supplies and math manipulatives were tested for lead. Three objects tested positive for lead out of these 22 classroom supplies. This is 14% of the objects tested. One of three pencils (33%) tested positive for lead in the outside paint. Analyzation of the data shows that kindergarteners are to some extent at risk of lead poisoning. Although the overall risk is 14%, pencils pose a significant risk as they were put in the mouth most often and one in three pencils tested positive.