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Estimation: What's the Big Deal?

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This is lesson on estimating with large numbers and is designed for High School students. We have done a problem on estimating the number of bottles of water needed to fill Heinz Field. The first estimation was done using a 3 foot crate filled with 20 oz bottles and the second was done just using the water from the bottles. The numbers were obviously different and the difference was then compared and talked about. The range of these types of problems is endless and can easily be transferred to real world problems such as the number of miles the average American drives a year, or the amount of paper used in a school year or any number of other problems. These types of problems take on a life of their own and can be very interesting to watch the students solve using different approaches and in the process, find more and more questions to answer.

This lesson covers a range of topics and is a great refresher on several others such as conversions, scientific notation, rounding, percent of error and estimating.

(Developed for High School grades)