Use the Birth MICA to answer the following questions related to premature births in Jackson County and the Kansas City metropolitan area.

1. Using the 2008 and 2009 data years, what is the premature birth rate for Jackson County? **12.2% of live births (or 12.2 per 100 live births** What is the rate for the State of Missouri? **12.6% of live births (or 12.6 per 100 live births)**
2. Use 95% confidence intervals to determine if the difference between your answers to Question 1 represents a statistically significant difference. Is the Jackson County rate significantly higher than, significantly lower than, or not significantly different from the State of Missouri rate? **The Jackson County and State of Missouri rates are not significantly different.**
3. Now calculate the premature birth rate using the same time period for a region that includes Jackson, Cass, Clay and Platte Counties. What is the rate? **11.8% of live births (or 11.8 per 100 live births)** Is this rate significantly higher than, significantly lower than, or not significantly different from the state rate at a 95% confidence level? **This rate is significantly lower than the state rate.**
4. If we change the confidence level to 99%, does that change the answer to Question 3?  If so, how?  **No**
5. Now use the Kansas City ZIP Code option on the Birth MICA to determine which ZIP Code in the range from 64011 through 64030 had the highest number of premature births for 2008-2009. **64030 (109)** Do you get the same answer if you look for the ZIP Code with the highest rate of premature births?  If the answer is not the same, which ZIP Code has the highest rate? **No – 64024 (15.5%)**