PLEASE SUBMIT YOUR WORK THROUGH GOOGLE CLASSROOM

1. **<u>NEXT MONDAY</u>, December 19, we will play a TRIVIA GAME based on what we have learned/reviewed so far. You should <u>continue to study for it</u>: this week please <u>review Lectures ##7-11</u>.**

2. The size of an atom is about ~10^{-10}m. The size of an atomic nucleus is ~10^{-14}m. **What part (<u>by volume</u>) of an atom does its nucleus take?**

   Hint: recall the formulae for the volume of a sphere (see Slide #9 of Lecture #5 for help), calculate volumes of nucleus and atom separately, then take a ratio. Alternatively, you may want to write down both volumes as formulae, then take an algebraic ratio, and only after that substitute the numbers in to calculate your answer.

3. **(OPTIONAL) While you are preparing for the game, think of <u>another clever question</u> you would like to add! Don't forget to <u>provide a full answer</u> to it** 😊

   QUESTION:

   FULL ANSWER:

   (<u>Three best questions from the class</u> will be selected and added to the game)