Tarea 5 Física del Electrón

Lunes, 9 de Septiembre 2019

- 1. Determine the mass (in kg) of the following atoms: (a) ${}^{4}He$, (b) ${}^{12}C$, (c) ${}^{208}Pb$.
- 2. Use the density of graphite, $\rho = 2 \times 10^3 \,\text{kg/m}^3$, to make an estimate of the size of a carbon atom.
- 3. The density of air at room temperature and atmospheric pressure is about 1.2 kg/m^3 . Estimate the number of molecules in one cubic meter of air.
- 4. Make an estimate of the number of atoms in a person who has a mass of 100 kg.
- 5. Estimate the energy of a K_{α} X ray from the element lead.
- 6. Which element has an L_{α} x ray that is closest in wavelength to the K_{α} X ray from the element manganese (Z = 25)?
- 7. Read about the Nobel Price in Physics of 2006. What was the achievement? Is there a newer and more precise experiment of the same type today?
- 8. Que es 1 Dalton?