

HOMework

due March 14th

1. A gold bar at Fort Knox weighs approximately 12.441 kg. How many atoms of gold are there in a Fort Knox gold bar? (Atomic weight of Au is 196.966)
2. How many moles of sodium carbonate are present in 1.773×10^{17} atoms of sodium carbonate, Na_2CO_3 ?
3. Nitroglycerin has the chemical formula $\text{C}_3\text{H}_5\text{N}_3\text{O}_9$. How many moles of carbon are in there in 2.00 moles of nitroglycerin?
4. How many carbon atoms are there in 52.06 g of carbon dioxide, CO_2 ? (Atomic weights C: 12.0107 O: 15.9994)