Work each of the following problems. SHOW ALL WORK.

1. How many atoms are contained in 3.46 moles of magnesium?

2. Convert 256.3 g sodium carbonate to formula units.

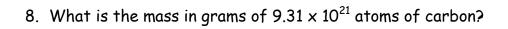
3. What is the mass of 12.4 molecules of carbon tetrachloride?

4. How many moles are contained in 0.43 g  $Al_2O_3$ ?

5. The number of silicon atoms in 42.1 g of silicon is \_\_\_\_\_\_.

6. 11.6 g of CuCl<sub>2</sub> = \_\_\_\_\_ moles CuCl<sub>2</sub>

7.	Convert	2.76	9	Se	to	moles	Se





## **BONUS**

What is the mass, in kilograms, of  $2.46 \times 10^{20}$  formula units of barium chloride?