Answer on Question #59243 - Chemistry – Inorganic Chemistry

Task:
How many moles are present in 1 g of gold?

Solution:
Gold is a chemical element with symbol Au.
The molar mass of Au is 196.97 g/mol.
We find the amount of Au:

$$n(Au) = \frac{m(Au)}{M(Au)}.$$

Then,

$$n(Au) = \frac{1g}{196.97 \, {}^{g}\!/_{mol}} = 0.005 \, mol.$$

Answer:

$$n(Au) = 0.005 \, mol.$$