

Counting Atoms, Avg Atomic Mass, and Formula Mass

Count the number of atoms in the following Formula

- | | | | |
|---|----------|----------|---------|
| 1. Mg Cl ₂ | Mg _____ | Cl _____ | |
| 2. Li SO ₄ | Li _____ | S _____ | O _____ |
| 3. 4 Al(OH) ₃ | Al _____ | O _____ | H _____ |
| 4. 2Sr ₃ (PO ₄) ₂ | Sr _____ | P _____ | O _____ |
| 5. 2 CH ₃ COOH | C _____ | H _____ | O _____ |

Calculate the average atomic mass for the following elements. Round all answers to two decimal places

Calculate the average atomic mass of iridium using the following data for two iridium isotopes

<i>Isotope</i>	<i>mass (u)</i>	<i>relative abundance</i>
Ir-191	191.0	0.3758
Ir-193	193.0	0.6242

Average atomic mass of Ir _____

Isotope	mass (u)	fractional abundance
Cr-50	49.946	4.35%
Cr-52	51.941	83.8%
Cr-53	52.941	9.5%
Cr-54	53.939	2.35%

Average atomic mass of chromium = _____

Find the molar masses of the following compounds. Round all answers to 4 significant figures

1) LiI _____ g/mol

2) PbCO_4 _____ g/mol

3) Mg(OH)_2 _____ g/mol

4) K_3PO_4 _____ g/mol

5) $(\text{NH}_4)_3\text{PO}_4$ _____ g/mol