

1. The sum of the atomic masses of the atoms in one molecule of $\text{C}_3\text{H}_6\text{Br}_2$ is called the

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| 1) formula mass | 2) isotopic mass |
| 3) percent abundance | 4) percent composition |

2. The gram-formula mass of NO_2 is defined as the mass of

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|------------------------------|----------------------------------|
| 1) one mole of NO_2 | 2) one molecule of NO_2 |
| 3) two moles of NO | 4) two molecules of NO |

3. A 1.0-mole sample of krypton gas has a mass of

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|---------|---------|---------|---------|
| 1) 19 g | 2) 36 g | 3) 39 g | 4) 84 g |
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4. What is the gram-formula mass of $\text{Ca}_3(\text{PO}_4)_2$?

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| 1) 248 g/mol | 2) 263 g/mol | 3) 279 g/mol | 4) 310. g/mol |
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5. The molar mass of $\text{Ba}(\text{OH})_2$ is

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|------------|------------|------------|------------|
| 1) 154.3 g | 2) 155.3 g | 3) 171.3 g | 4) 308.6 g |
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6. What is the gram molecular mass of 1 mole of $\text{C}_3\text{H}_5(\text{OH})_3$?

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| 1) 48 g | 2) 58 g | 3) 74 g | 4) 92 g |
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7. Which sample contains a mole of atoms?

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| 1) 23 g Na | 2) 24 g C | 3) 42 g Kr | 4) 78 g K |
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8. One mole of O_2 has approximately the same mass as one mole of

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| 1) CH_4 | 2) S | 3) LiH | 4) Cl_2 |
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9. The total number of moles represented by 20 grams of CaCO_3 is

- 1) 1 2) 2 3) 0.1 4) 0.2

10. What is the mass in grams of 2.0 moles of NO_2 ?

- 1) 92 2) 60. 3) 46 4) 30.

11. Which sample contains the same number of atoms as 24 grams of carbon?

- 1) 80. g Ar 2) 24 g Mg 3) 10. g Ne 4) 4.0 g He

12. What is the total mass of oxygen in 1.00 mole of $\text{Al}_2(\text{CrO}_4)_3$?

- 1) 192 g 2) 112 g 3) 64.0 g 4) 48.0 g

13. A sample of a compound contains 65.4 grams of zinc, 12.0 grams of carbon, and 48.0 grams of oxygen. What is the mole ratio of zinc to carbon to oxygen in this compound?

- 1) 1:1:2 2) 1:1:3 3) 1:4:6 4) 5:1:4

14. The gram molecular mass of CO_2 is the same as the gram molecular mass of

- 1) CO 2) SO₂ 3) C₂H₆ 4) C₃H₈

15. The number of moles of molecules in a 12.0-gram sample of Cl_2 is

- 1) $\frac{12.0}{35.5}$ mole 2) $\frac{12.0}{71.0}$ mole 3) 12.0 moles 4) 12.0×35.5 moles