

NAME _____ PER _____

Moles Worksheet

Determine the molar mass of each of the following.

1. Na
2. Cu
3. Si
4. Cl
5. Pb

Determine the number of moles in each of the following:

6. 23.5 grams of Co
7. 216 grams of Ag
8. .0759 g of W
9. 467.1 kg of K

Determine the number of moles in each of the following:

10. 4.53×10^{23} atoms of Na
11. 7.899×10^{23} atoms of Cu
12. 1.42×10^{24} atoms of Ti (Titanium)
13. 5.08×10^{22} atoms of Fe

Determine the mass of each of the following:

14. 35.1 mol of K
15. 1.04 mol of Cu
16. .0250 mol of Au
17. 1.90×10^{-2} Mol Of U

Determine the number of atoms in each of the following:

18. 2.35 mol of Rb
19. 1.79 mol of S
20. .0500 mol of Ar
21. 105 mol of Br

Determine the number of atoms in each of the following:

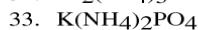
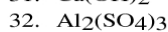
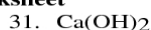
22. 23.5 grams of Co
23. 216 grams of Ag

Determine the number of grams in each of the following:

24. 5.94×10^{23} atoms of Na
25. 8.099×10^{23} atoms of Cu

Determine the molar mass of the following compounds.

26. KF
27. NaOH
28. Ca_3N_2
29. MgSO_4
30. $\text{CH}_3\text{CO}_2\text{CH}_2\text{NH}_2$



Determine the number of molecules or formula units in each of the following:

34. 10.2 moles of KF
35. .005689 moles of NaOH
36. 1.06 moles of $\text{Al}_2(\text{SO}_4)_3$

Determine the number of moles in each of the following:

37. 4.03×10^{23} molecules of water
38. 5.08×10^{23} molecules of ammonia (NH_3)

39. 3.01×10^{23} molecules of hydrogen gas (H_2)

Determine the number of atoms or formula units in each of the following:

40. 6.32 moles of Fe
41. .235 moles of Zn
42. 10.2 moles of KF
43. .005689 moles of NaOH
44. 1.06 moles of $\text{Al}_2(\text{SO}_4)_3$

Determine the number of grams in each of the following:

45. 6.32 moles of Fe
46. .235 moles of Zn
47. 10.2 moles of KF
48. .005689 moles of NaOH
49. 1.06 moles of $\text{Al}_2(\text{SO}_4)_3$

Determine the number of moles in each of the following:

50. 46.1 g of LiOH
51. 506.3 g of C_4H_{10}
52. .0750 g of $\text{Ca}_3(\text{PO}_4)_2$

Determine the number of moles, molecules and atoms in each of the following:

53. 45.23 grams of water
54. .8923 grams of potassium chloride
55. 1.00 kg of aluminium nitrate, $\text{Al}(\text{NO}_3)_3$.