Answer Key

Calculating Molar Mass

(Honors Chemistry)

Chemical Name	Chemical Formula	Atom, Molecule, or Formula Unit	Molar Mass *(g)*
1. Lead (IV) sulfite	$Pb(SO_3)_2$	F	367
2. Dinitrogen pentoxide	N_2O_5	M	108
3. Copper (II) chlorate	$Cu(ClO_3)_2$	F	231
4. Cobalt (II) nitrite	$Co(NO_2)_2$	F	151
5. Hydrogen gas	H_2	M	2
6. Hydrochloric Acid	HCl	M	36.5
7. Iron (II) sulfate	$FeSO_4$	F	248
8. Gold	Au	A	197
9. Tin (II) phosphite	$Sn_3(PO_3)_2$	F	515
10. Water	H_2O	M	18
11. Cobalt (III) oxalate	$Co_2(C_2O_4)_3$	F	323
12. Carbon tetrafluoride	CF_4	M	111
13. Zinc cyanide	$Zn(CN)_2$	F	16
14. Mercuric nitride	Hg_3N_2	F	631
15. Strontium perchlorate	$Sr(ClO_4)_2$	F	342
16. Potassium dichromate	$K_2Cr_2O_7$	F	294
17. Iodine	I_2	M	254

Chemical Name	Chemical Formula	Atom, Molecule, or Formula Unit	Molar Mass *(g)*
18. Silver chloride	**$AgCl$**	**F**	**143.5**
19. Phosphorus pentachloride	**PCl_5**	**M**	**17**
20. Lead	**Pb**	**A**	**207**
21. Acetic acid	**$HC_2H_3O_2$**	**F**	**91**
22. Nickel (III) chromate	**$Ni_2(C_rO_4)_3$**	**F**	**348**
23. Dicarbon hexahydride	**C_2H_6**	**M**	**30**
24. Rubidium permanganate	**$RbMnO_4$**	**F**	**204**
25. Ammonium nitrate	**NH_4NO_3**	**F**	**80**
26. Magnesium hydroxide	**$Mg(OH)_2$**	**F**	**58**
27. Iron (II) carbonate	**$FeCO_3$**	**F**	**116**
28. Bromine	**Br_2**	**M**	**160**
29. Potassium dihydrogen phosphate	**KH_2PO_4**	**F**	**136**
30. Carbon dioxide	**CO_2**	**M**	**44**
31. Hydrosulfuric acid	**H_2S**	**M**	**34**
32. Sulfur dioxide	**SO_2**	**M**	**64**
33. Sodium hydrogen carbonate	**$NaHCO_3$**	**F**	**84**
34. Chromium (III) sulfide	**Cr_2S_3**	**F**	**200**
35. Sulfuric Acid	**H_2SO_4**	**F**	**98**
36. Nitrogen trihydride	**NH_3**	**M**	**17**
37. Gold (III) hypochlorite	**$Au(ClO)_3$**	**F**	**351.5**