

Honors Chemistry Final Exam Review Answer Sheet

5. physical change – a, c, d, f, j, k, l
chemical change – b, e, g, h, i

1. 142.4 amu
2. 3 mole Ca, 2 mole P, 8 mole O
3. 23 800 g
4. 1.14×10^{24} formula units
5. 0.749 moles
6. 8.73×10^{23} atoms
7. 6.09×10^{-2} moles
8. 529 grams
9. 2.23 mole
10. 2.63 g
11. 1.97×10^{25} atom
12. 35.7 L
13. 32.11% Fe, 27.62% C, 3.48% H, 36.79% O
14. 2.44 g
15. 40.6 g
16. Sr_3PO_4
17. CuF_2 , copper(II) fluoride
18. $\text{C}_8\text{H}_8\text{O}_3$, CFH_2 , SCl , CH_2O
19. $\text{C}_{12}\text{H}_8\text{O}_4$
20. N_2O_4

Honors Chemistry Review Sheet 2 Answer Sheet

1. No reaction
2. No reaction
3. $(\text{NH}_4)_2\text{CO}_3 + \text{CaCl}_2 \rightarrow 2\text{NH}_4\text{Cl} + \text{CaCO}_3\downarrow$
4. $\text{Na}_2\text{S} + \text{ZnCl}_2 \rightarrow 2\text{NaCl} + \text{ZnS}\downarrow$
5. $2\text{K}_3\text{PO}_4 + 3\text{Sr}(\text{NO}_3)_2 \rightarrow \text{Sr}_3(\text{PO}_4)_2\downarrow + 6\text{KNO}_3$
6. $\text{Mg}(\text{NO}_3)_2 + 2\text{NaOH} \rightarrow \text{Mg}(\text{OH})_2\downarrow + 2\text{NaNO}_3$
7. $\text{HC}_2\text{H}_3\text{O}_2 + \text{KOH} \rightarrow \text{KC}_2\text{H}_3\text{O}_2 + \text{H}_2\text{O}$
8. $\text{H}_2\text{CO}_3 + 2\text{NaOH} \rightarrow \text{Na}_2\text{CO}_3 + 2\text{H}_2\text{O}$
9. $2\text{HNO}_3 + \text{Ba}(\text{OH})_2 \rightarrow \text{Ba}(\text{NO}_3)_2 + 2\text{H}_2\text{O}$
10. $2\text{Sr} + \text{O}_2 \rightarrow 2\text{SrO}$
11. $2\text{Li} + \text{H}_2 \rightarrow 2\text{LiH}$
12. $2\text{Cs} + \text{Br}_2 \rightarrow 2\text{CsBr}$
13. $3\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
14. no reaction
15. no reaction
16. $\text{Mg} + \text{CuSO}_4 \rightarrow \text{MgSO}_4 + \text{Cu}$
17. $\text{Cl}_2 + 2\text{KBr} \rightarrow 2\text{KCl} + \text{Br}_2$
18. no reaction