|  |  |  |
| --- | --- | --- |
| **Stoichiometry** | | |
| **Year** | **Q#** | **description** |
| 2002 | 2 | (a only) determine limiting reactant, use to determine [Zn2+] |
| 2002 | 3 | (a—c) write balance combustion equation, use PV=nRT to get product formed, given mass and kJ determine enthalpy |
| 2004 | 2 | (a—c)Given mass and volume (PV=nRT) of reactants determine moles, then limiting reactant, moles of product |
| 2004B | 2 | (a and b) Given %, determine EF, given density determine molar mass then MF (d) given density of limiting reactant determine moles of products (great gas laws stoich) |
| 2004B | 3 | (a only) given density of 6% solution determine moles of substance then moles of product formed |
| 2006 | 3 | (a and b) use combustion data to get mass and EF, use density to get molar mass and MF |
| 2007B | 3 | (a only) use PV=nRT to get moles—they mention time to throw you ;) |
| 2008B | 3 | (all) double replacement of solid added to solution: list evidence of chemical reaction, cal moles of each, identfy LR, [spectator ion] , choose particulate level drawing that best represents reaction |
| 2010 | 3 | (a only) get moles from soution data, use that and PV=nRT to get volume of product |
| 2011B | 2 | (a i—iii only) gases in tank, moles one, excess grams of other, mole fraction |
| 2011B | 3 | (a and b) given MF state EF, given grams and kJ—determine kJ/mol |

**Directions:** these are the FR for stoichiometry, use the description to determine when you can answer them. For instance till we discuss solution stoichiometry—those that deal with [ ] will need to wait. Probably cannot answer any till after lesson three