Ch 12 answer key

abby Jackson

1. $2Cl + 2NaI \longrightarrow 2NaCl + I_2$
2. The reactant that runs out first in a reaction.
3. The ratio of your actual yeild to your theoretical yeild.
4. $2YAt_3 + Pr_2Te_3 \longrightarrow Y_2Te_3 + 2PrAt_3$
5. $\frac{742.01g\ YAt_3}{1} \cdot \frac{1mol\ YAt_3}{719g\ YAt_3} = \frac{1.03mol}{2} = 0.516mol\ YAt_3$ ↑ Limiting

   $\frac{1240.77g\ Pr_2Te_3}{1} \cdot \frac{1mol}{666g} = 1.86mol\ Pr_2Te_3$

6. $1.86 - 0.516 = \frac{1.34mol\ Pr_2Te_3}{1} \cdot \frac{666g}{1mol} =$ 897.796g Pr_2Te_3 remain

7. $\frac{0.516mol\ YAt_3}{1} \cdot \frac{719g}{1mol} = 371.004g\ YAt_3$

8. ~~1.03mol YAt_3~~ 795.65g
9. 93.40%
10. 6.6%