

AP Summer Assignment Stoichiometry Problems - ANSWER KEYS

READ ME! 😊

The first page has the final answers so you can quickly check your work. At the bottom are links to more detailed answer keys. One is a handwritten key that shows you how to do the problems and one is a typed key that may do them a little differently but provides some commentary along with the work. PLEASE try to do the problems without peaking at the worked out solutions first – the goal is to stretch your brain and try to puzzle through it! AP Chem is all about learning to persevere through problems you haven't seen before so start practicing now! Keep calm, track down mistakes, learn from them, and improve. It isn't about getting them all correct the first time. It is about exercising your brain and practicing perseverance. Use pencil and plan to use a big eraser! Remember – thinking about the units and using dimensional analysis can help you connect the dots until you get your answer!

Answer Key at a Glance

- | | |
|---|---|
| 1) BaCl_2 | 21) $X = \text{Ni}$ |
| 2) SKIP | 22) SKIP |
| 3) A) 27.68% | 23) 52.43 mL |
| 4) A) $X = 138.9 \text{ g/mol}$, lanthanum,
B) $X = 204.5 \text{ g/mol}$, thallium, Tl | 24) $M = 23.0 \text{ g/mol}$, sodium |
| 5) $M = 40.75 \text{ g/mol}$, = K
(closest option!) | 25) $1.00\text{cm}^3 \rightarrow 2.12 \text{ cm}^3$ |
| 6) 91.2 g/mol | 26) $M = 24.3 \text{ g/mol}$, magnesium |
| 7) – 11) SKIP | 27) $M = \text{tin}$ |
| 12) 4.78×10^{19} | 28) P_2F_4 |
| 13) $\text{NaCl} = 43\%$, $\text{KCl} = 57\%$ | 29) $M = \text{magnesium}$ |
| 14) $2.26 \times 10^5 \text{ g}$ | 30) A) $X = 80 \text{ g/mol}$, bromine
B) $M = 64 \text{ g/mol}$, copper |
| 15) 50.09% | 31) A) 0.005 mol
B) 0.200 M
C) $M = \text{Li}$ |
| 16) SKIP | 32) $X = \text{lead}$ |
| 17) KClO_3 reaction | 33) A) 0.040 mol
B) 14.8% |
| 18) 207.2 g/mol, lead | 34) $M = \text{silver}$, $X = \text{chlorine}$ |
| 19) A) 66.7% gas, 33.3% solid
B) UF_2O_2 | |
| 20) TiCl_3 | |

Handwritten Key

<https://tinyurl.com/s286v459>

Typed Up Key (from another teacher)

<https://tinyurl.com/uza4m39c>