

EXTRA PRACTICE: 3-Step Mole Conversions Mixed Practice #2

Name: _____

Solve the following problems. Be sure to show all of your work and include correct units!

1. How many grams of calcium nitrate are in 3.24×10^{23} formula units (f.u.) of calcium nitrate?
2. How many atoms of copper are in 3.00 grams of copper?
3. How many grams of sulfur dioxide are in 1.12×10^{23} molecules of sulfur dioxide?
4. How many nitric acid formula units (f.u.) are in 4.20 grams of nitric acid?
5. How many molecules of laughing gas (dinitrogen monoxide) are in 1.78×10^{23} grams of laughing gas?
6. How many grams of silver nitrate are in 3.44×10^{22} formula units (f.u.) of silver nitrate?

7. How many grams of water are in 3.77×10^{23} molecules of pure water?

8. How many atoms of Tungsten are in 5.69 grams of Tungsten?

9. How many ammonium sulfide formula units (f.u.) are in 7.35 grams of ammonium sulfide?

10. How many molecules of phosphorus pentachloride are in 1.09×10^{23} grams of this substance?

11. How many grams of pure mercury are in 2.54×10^{23} atoms of mercury?

12. How many formula units (f.u.) of copper (II) sulfate are in 1.43 grams of copper (II) sulfate?