**Mole Calculation Fun!**

1) How many moles are in 2.3 grams of phosphorus?

2) How many grams are in 11.9 moles of chromium?

3) How many moles are in 9.8 grams of calcium?

4) How many grams are in 238 moles of arsenic?

5) How many grams are in 0.02 moles of beryllium iodide, BeI2?

6) How many moles are in 68 grams of copper (II) hydroxide, Cu(OH)2?

7) How many grams are in 3.3 moles of potassium sulfide, K2S?

8) How many moles are in 1.2 x 103 grams of ammonia, NH3?

**Mole Calculation Fun! – Answer Key**

1) How many moles are in 2.3 grams of phosphorus? **0.01850 moles**. Remember that phosphorus has the formula P4, which gives it a molar mass of 124 g/mol. If you had done the math using just the atomic weight of phosphorus, you probably got 0.074 moles – this means that you get the idea of the mole calculation, but that your formula wasn’t right. It happens.

2) How many grams are in 11.9 moles of chromium? **619 grams**

3) How many moles are in 9.8 grams of calcium? **0.24 moles**

4) How many grams are in 238 moles of arsenic? **17,800 grams**

5) How many grams are in 0.02 moles of beryllium iodide, BeI2? **5 grams**

6) How many moles are in 68 grams of copper (II) hydroxide, Cu(OH)2?

**0.70 moles**

7) How many grams are in 3.3 moles of potassium sulfide, K2S? **360 grams**

8) How many moles are in 1.2 x 103 grams of ammonia, NH3? **71 moles**