

Chemistry I

Mass-Mole Conversion Handout

Name _____

Date _____

Calculate the molecular mass for each of the following molecules:

1. KOH

2. N₂O₂

3. Sr₃(PO₄)₂

Convert each of the following from grams to moles:

4. 15.0 g C₂H₆

5. 140.0 g NaOH

6. 27.2 g H₂O

7. 45.7 g CaCO₃

Convert moles to grams in each of the following:

8. 1.5 moles NH₃

9. 0.65 moles H₂SO₄

Convert the following to moles:

10. 3.01×10^{23} atoms Na

11. 2.41×10^{24} molecules CO₂

Using Factor-Labeling, convert the following to atoms or molecules:

12. 2.56 moles Ca

13. 0.75 moles AlCl₃

Using Factor-Labeling, find the following:

14. The number of grams in 1.25×10^{25} molecules of aluminum oxide.

15. The number of molecules in 115 g nitrogen dioxide.