

Be sure to show all work, use the correct number of significant figures, circle final answers and use correct units in all problems.

1. Write and balance the following reactions: (14 points)

a. Calcium iodide is formed from its elements

b. Molybdenum(III) selenide decomposes to its elements

c. Combustion of butane, C_4H_{10} .

d. Gallium reacts with a solution of zinc(II) nitrate.

e. A bright white precipitate forms when solutions of silver(I) nitrate and potassium iodide react.

f. Sodium hydroxide neutralizes hydrochloric acid.

2. Classify each of the above reactions: (1 point each)

a.

d.

b.

e.

c.

f.