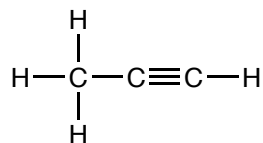


Quiz 2

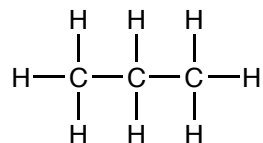
1. Propyne reacts with hydrogen to form propane.



propyne



hydrogen



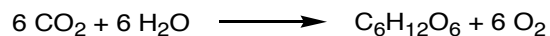
propane

a. Write the chemical formula(s) for the reactant(s) in the reaction described above.

b. Write the chemical formula(s) for the product(s) in the reaction described above.

c. Write a balanced chemical equation for the reaction.

2. In photosynthesis, carbon dioxide and water are converted to glucose (a sugar) and oxygen.

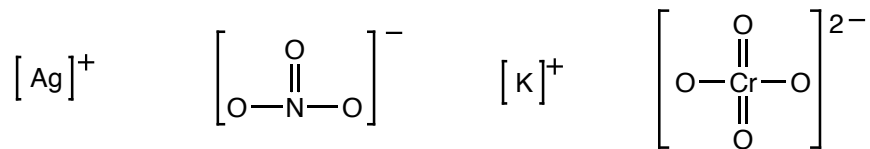


a. Assuming that there is enough water present, how many molecules of glucose can be made from 12 molecules of carbon dioxide?

b. Assuming that there is enough water present, how many molecules of glucose can be made from 3.5 mole of carbon dioxide?

c. What is the mass of one mole of carbon dioxide.

3. Silver nitrate and potassium chromate can be combined to form silver chromate and potassium nitrate. The structures for the ions are drawn below.



silver ion

nitrate ion

potassium ion

chromate ion

a. Write the chemical formula(s) for the reactant(s) in the reaction described above.

b. Write the chemical formula(s) for the product(s) in the reaction described above.

c. Write a balanced chemical equation for the reaction.

4. Salt (sodium chloride) reacts with silver nitrate according to the equation written below.



a. What do the “(aq)” and “(s)” in the equation above mean?

b. Determine the mass of 1 mole of NaCl.

c. Determine the mass of 1 mole of AgCl

d. If a piece of bread contains 0.555 g of NaCl, how many grams of AgCl will form?