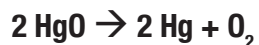


1. When mercury (II) oxide is heated, it decomposes into mercury and oxygen gas according to the following **BALANCED** equation.



- a. Given that the density of oxygen is 1.439 g/L, how many liters of oxygen gas can be produced if 2.0 moles of mercury (II) oxide are heated?

- b. How many molecules of oxygen gas are produced if 25.0 g of mercury (II) oxide are heated?

2. How many molecules of sodium nitrate are produced when 20.0 g of sodium azide, NaN_3 , react according to the following **BALANCED** equation?

