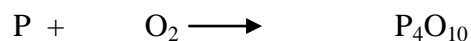


# Mole – Mass Problems

Name:

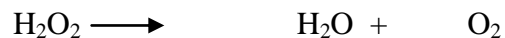
Show your work to receive credit! Do not forget to balance the equations before you begin.

1. Phosphorus burns in air according to the following equation:



- a. What mass of phosphorus will be needed to produce 3.25 moles of  $\text{P}_4\text{O}_{10}$ ?
- b. If 0.489 moles of P burns, what mass of oxygen is used, and what mass of  $\text{P}_4\text{O}_{10}$  is produced?

2. Hydrogen peroxide breaks down releasing oxygen, according the following equation:



- a. What mass of oxygen is produced when 1.84 mol of  $\text{H}_2\text{O}_2$  decomposes?
- b. What mass of water is produced when 5.00 moles of oxygen is produced by this reaction?