

- \_\_\_\_\_ 1. The sum of the partial pressures of all gases in the atmosphere makes up the \_\_\_\_\_.  
At sea level this is \_\_\_\_\_ mmHg.
- \_\_\_\_\_ 2. Since inhaled air mixes with the air in the air passages,  
\_\_\_\_\_ a. the oxygen content of inhaled air is \_\_\_\_\_ (higher, lower) than that of the atmosphere.  
\_\_\_\_\_ b. the carbon dioxide content of inhaled air is \_\_\_\_\_ (higher, lower) than that of the  
atmosphere.
- \_\_\_\_\_ 3. Since the air passes over moist surfaces in the respiratory passages, it usually  
becomes saturated with \_\_\_\_\_.  
\_\_\_\_\_ a. This water does not increase the total gas pressure, but does it contribute its own  
partial pressure?  
\_\_\_\_\_ b. Therefore, it causes the partial pressure of oxygen to \_\_\_\_\_ (increase, decrease).
- \_\_\_\_\_ 4. The partial pressure of oxygen in the air entering the alveoli is normally \_\_\_\_\_ mmHg.  
\_\_\_\_\_ a. The partial pressure of oxygen in the pulmonary arteries is normally \_\_\_\_\_ mmHg.  
\_\_\_\_\_ b. This means that the net flow of oxygen would be \_\_\_\_\_ (into, out of) the blood.  
\_\_\_\_\_ c. The partial pressure of oxygen in the pulmonary veins is normally \_\_\_\_\_ mmHg.  
\_\_\_\_\_ d. Therefore, would the net flow of oxygen continue if the blood remained in the  
lungs for a longer period of time?
- \_\_\_\_\_ 5. In what part of the body does the blood normally lose oxygen?
- \_\_\_\_\_ 6. The difference in the partial pressures of carbon dioxide in the systemic arteries and  
systemic veins indicates that carbon dioxide \_\_\_\_\_ (enters, leaves) the blood at the  
systemic tissues.
- \_\_\_\_\_ 7. The difference in the partial pressures of carbon dioxide in the pulmonary arteries  
and pulmonary veins indicates that carbon dioxide \_\_\_\_\_ (enters, leaves) the blood  
at the respiratory membrane.