4. Once the oxygenated blood reaches the muscles, the oxygen defuses into the muscles and then into the mitochondria. This happens because the mitochondria have used the oxygen that was already there for aerobic respiration.

5. After the mitochondria have used the oxygen for aerobic respiration, CO2 is a waste product. There is a high volume of partial pressure in the muscles due to the amount of CO2 being created from aerobic respiration.

6. The CO2 then defuses from the muscles into the blood vessels. The deoxygenated blood is then transported the lungs via the heart.

7. Because the partial pressure in the lungs is lower than the capillaries, the CO2 defuses into the alveoli.

8. Once the CO2 has defused into the alveoli, it then defuses into the atmosphere because the partial pressure of CO2 is lower than in the lungs.