

9. Figure 13-4 illustrates the microscopic structure of the respiratory unit of lung tissue. The external anatomy is shown in Figure 13-4A. Color the intact alveoli yellow, the pulmonary capillaries red, and the respiratory bronchioles green.

A cross section through an alveolus is shown on Figure 13-4B and a blow-up of the respiratory membrane is shown in Figure 13-4C. On these illustrations color the alveolar epithelium yellow, the capillary endothelium pink, and the red blood cells in the capillary red. Also, label the alveolar chamber and color it pale blue. Finally, in Figure 13-4C label the region of the fused basement membranes; add the symbols for oxygen gas (O_2) and carbon dioxide gas (CO_2) in the sites where they would be in higher concentration and arrows correctly showing their direction of movement through the respiratory membrane.

