

a process requires oxygen Chap 14 Sec 3
 a complex chemical reaction and glucose releases
 also called energy
 respiration cellular
 not the same as respiration
 breathing

Cellular Respiration

$$\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Energy}$$

The diagram illustrates the stages of cellular respiration. It begins with Glucose entering the cell. Glycolysis occurs in the cytoplasm, producing 2 ATP. The resulting pyruvate then enters the Mitochondrion. Inside the mitochondrion, the Krebs Cycle and Electron Transport chain are shown. The Krebs Cycle produces 2 ATP, and the Electron Transport chain produces 32 ATP. The final products are 6 Water and 6 Carbon dioxide, which are released from the mitochondrion.

a thick sticky substance Chap 14 Sec 3
 moistens airways mucus keeps airway lining from drying out
 traps dust and other particles in the air

The diagram shows a cross-section of the human head and neck, highlighting the respiratory system. Labels include: Nasal cavity, Nostril, Mouth, Throat (pharynx), and Voice box (larynx). The diagram illustrates the path of air entering through the nostrils, passing through the nasal cavity, and then down the throat to the voice box.

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tiny hair-like projections

found in the nasal
cavities

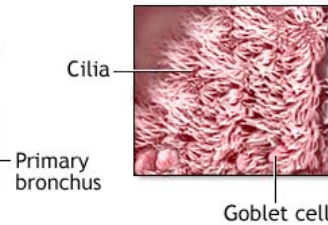
cilia

move together in
a sweeping motion

sweep mucus to
throat to be
swallowed and
digested



Hair-like projections called cilia line the primary bronchus to remove microbes and debris from the interior of the lungs



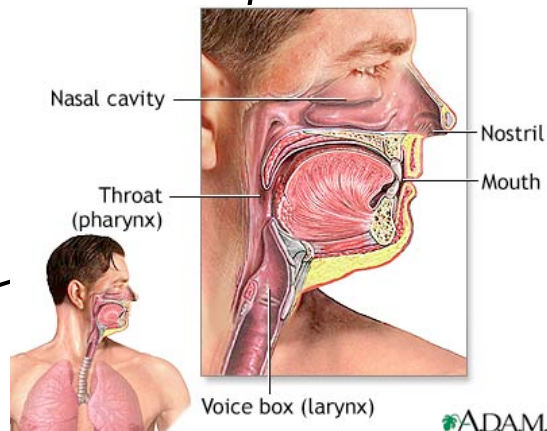
ADAM.

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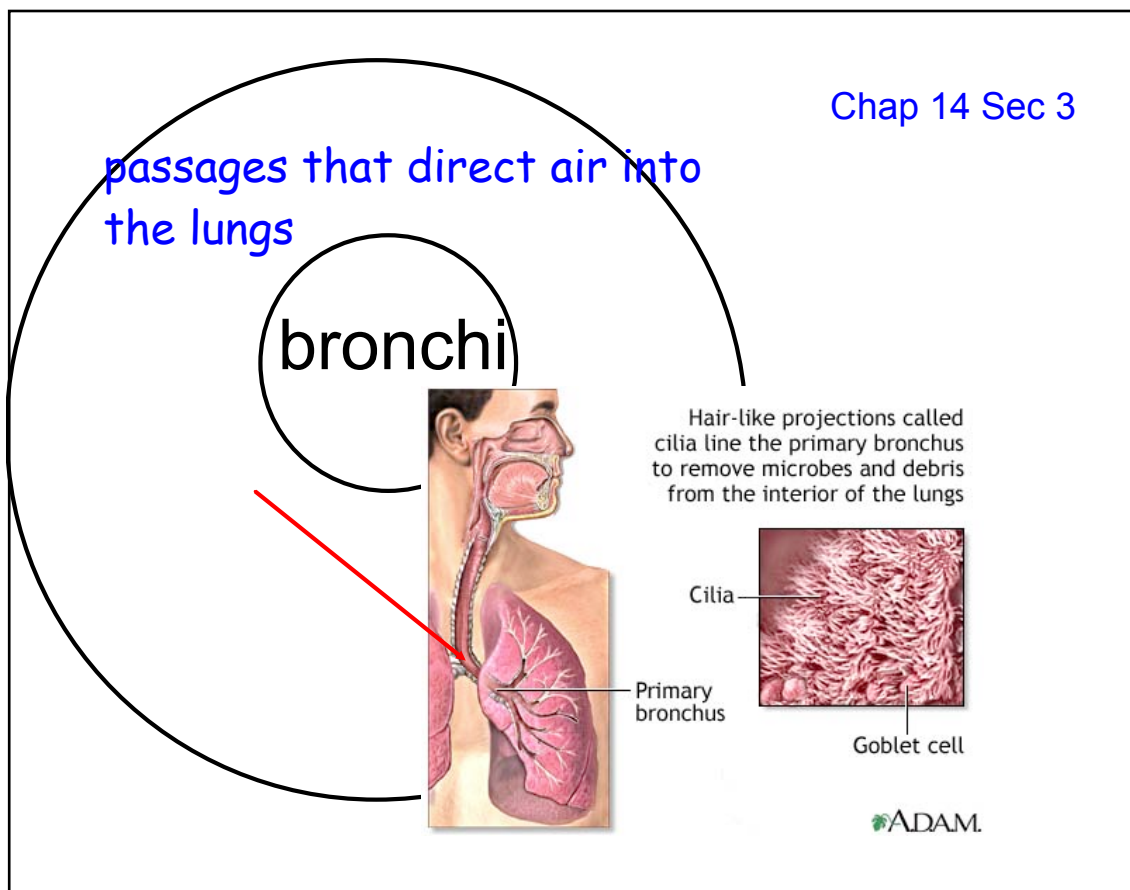
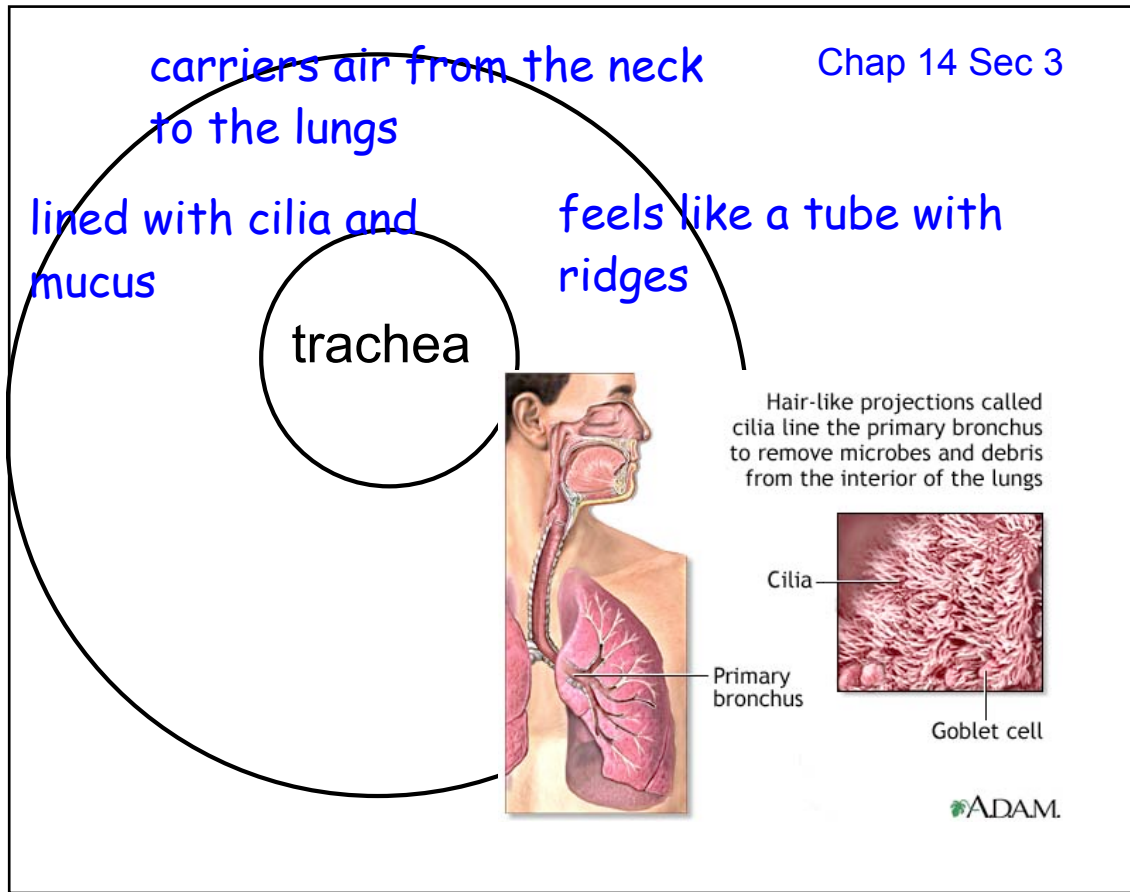
part of the respiratory
and digestive systems

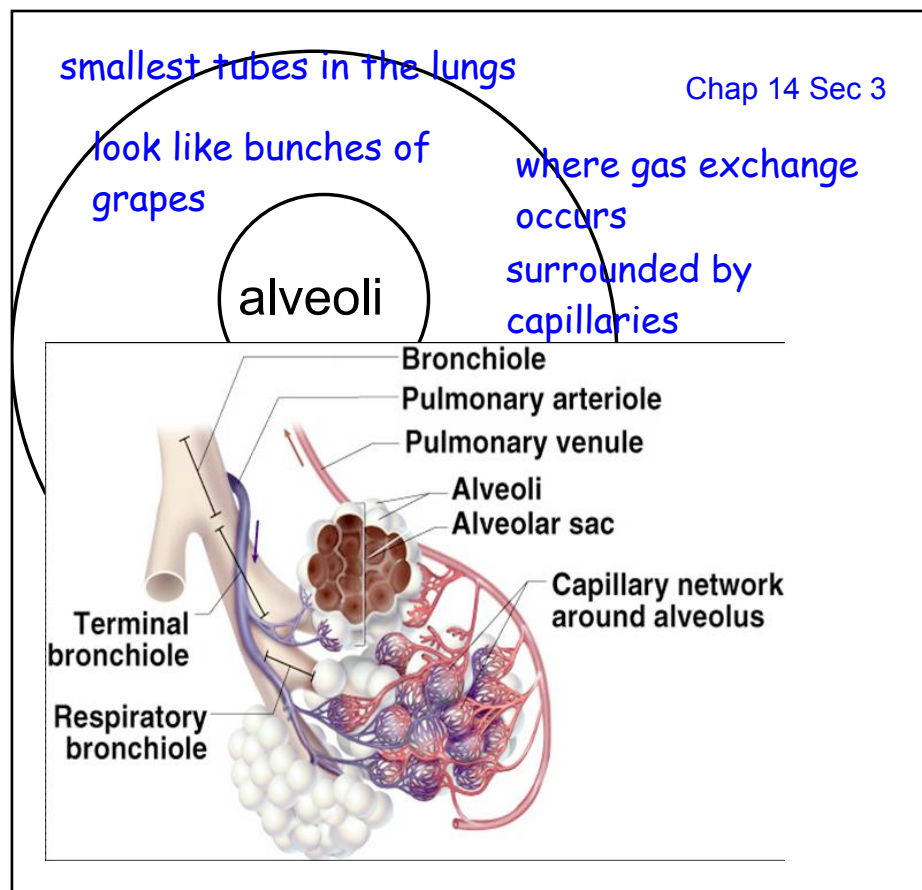
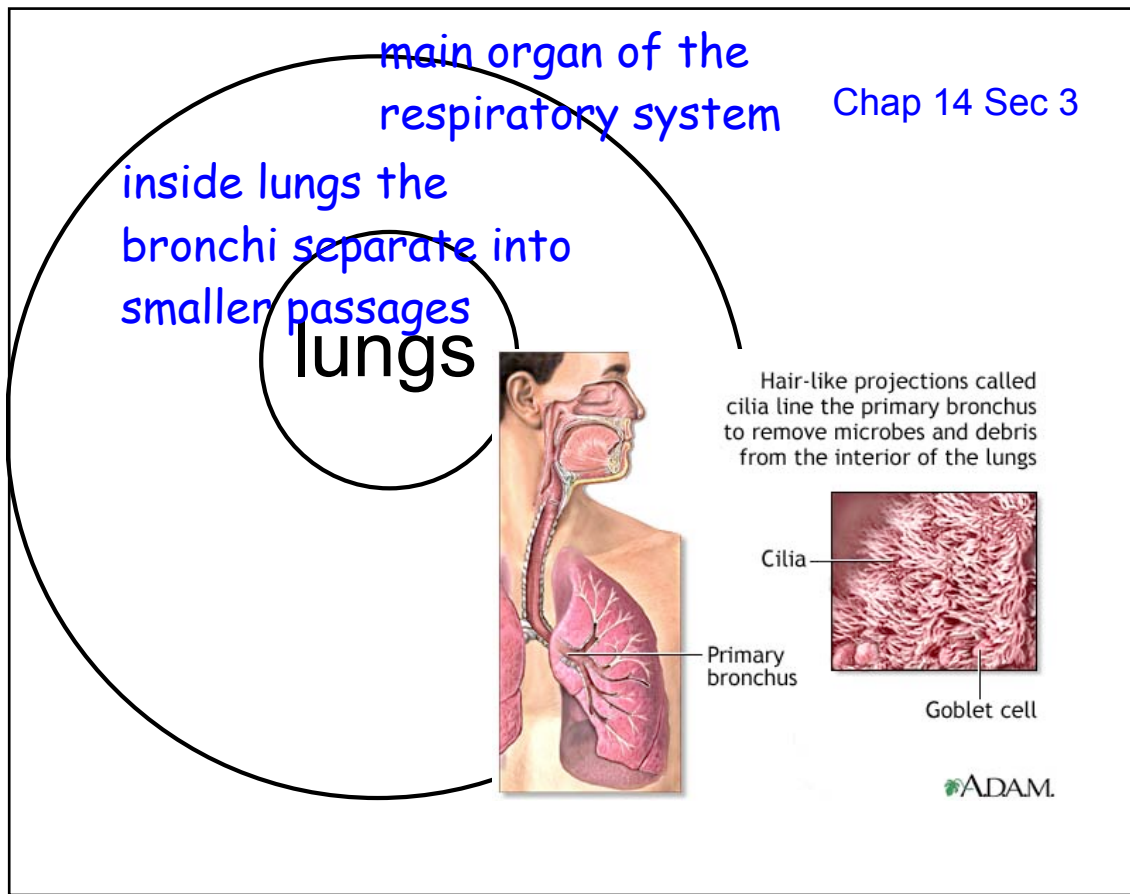
pharynx

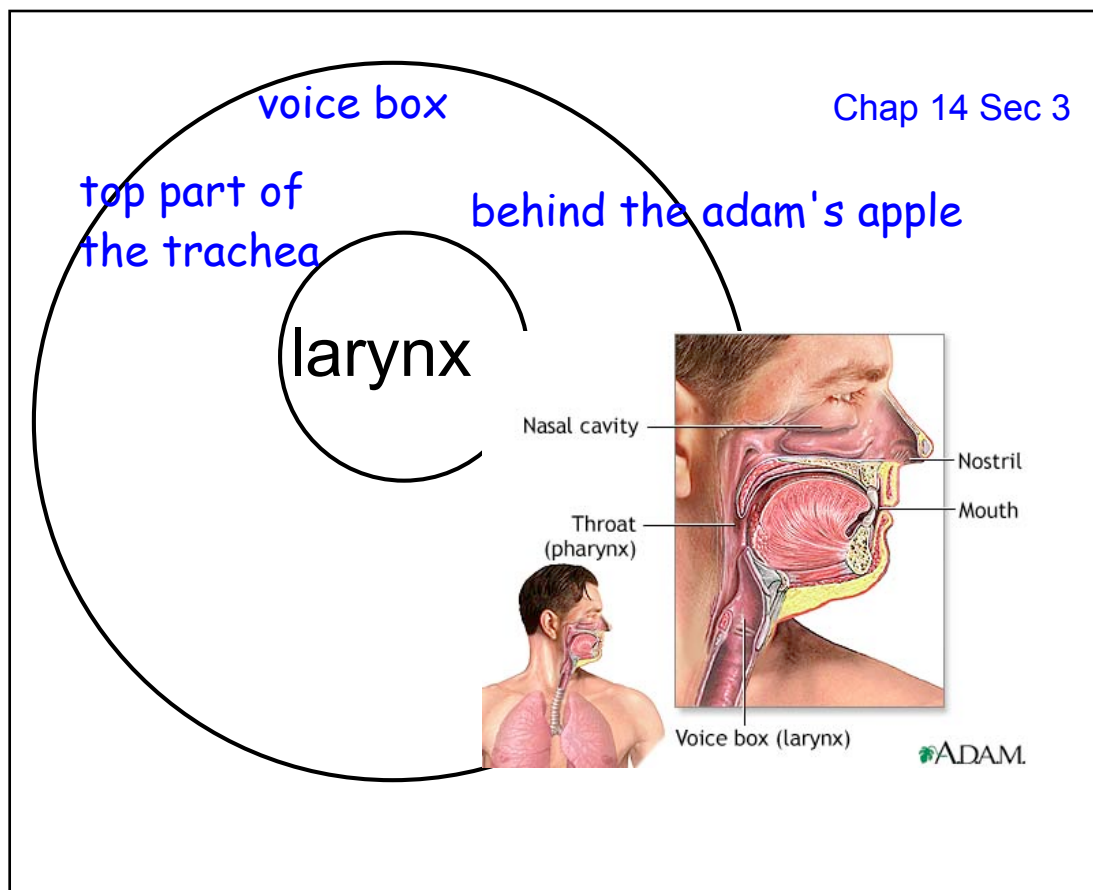
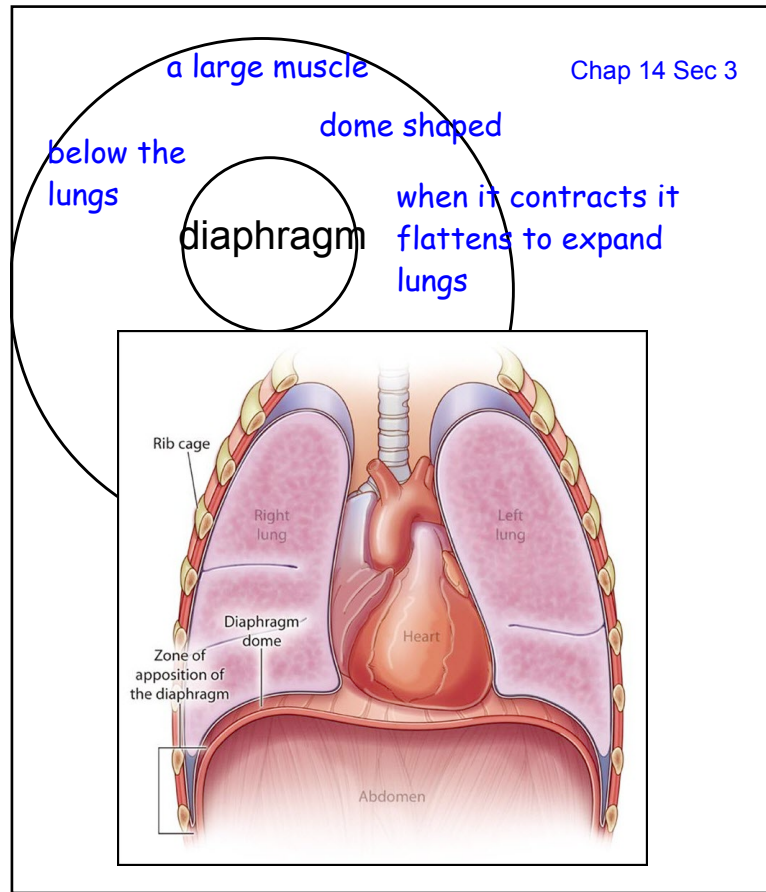
connected to
nose and mouth



ADAM.







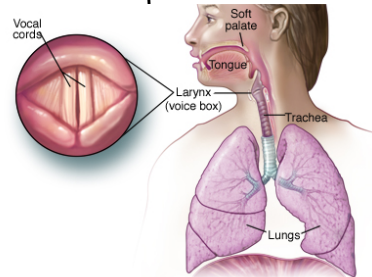
folds of connective
tissue

vibrate to
create
sound

vocal
chord

located at the top of the
trachea

air coming from the
lungs makes them
vibrate as it passes
through



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