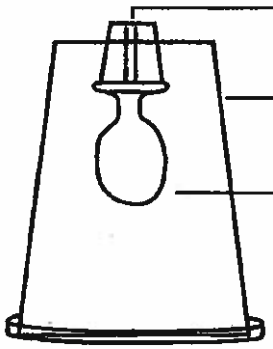
Name: KEY

Lung Model Worksheet

Circle the correct answers or fill in the blanks.

1. When the large balloon is pulled down, it makes the total volume inside the cup chamber (larger, smaller). When this happens the small balloon (inflates, deflates).
2. When the large balloon is pushed up, it makes the total volume inside the cup chamber (larger, smaller). When this happens the small balloon (inflates, deflates).
3. When the cavity inside the cup chamber gets smaller, the air pressure inside the chamber (increases, decreases). This pressure difference between the inside and outside of the chamber causes air to (move into, move out of) the small balloon.
4. When the cavity inside the cup chamber gets larger, the air pressure inside the chamber (increases, decreases). This pressure difference causes air to (move into, move out of) the small balloon.
5. Fill in the blanks.

answers may vary



Hole in stopper represents bronchi.

Cup represents thoracic cavity.

Small balloon represents lungs.

Large balloon represents diaphragm.

6. When the diaphragm contracts, the chest cavity gets (larger, smaller), the air pressure inside the lungs (increases, decreases), air (enters, leaves) the lungs and they (inflate, deflate).
7. When the diaphragm relaxes, the chest cavity gets (larger, smaller), the air pressure inside the lungs (increases, decreases), air (enters, leaves) the lungs and they (inflate, deflate).
8. In the model the chest cavity cannot expand. In our body the chest cavity expands and contracts. How is this expansion and contraction coordinated with diaphragm movements?

ribs (thoracic cavity) expands when contracted along with the contraction of the diaphragm increasing the volume of the thoracic cavity, which decreases the pressure allowing air to enter the lungs.