

Lung Model

Name _____

Part One

1. While moving the handle in and out, hold the opening of the bottle near your face. What do you feel?
2. Describe what happens to the balloon, inside the bottle, as you move the handle in and out. Explain your observations.
3. Explain what happens to your rib cage when you breathe in and out. (Expand and compress)
4. Where are the lungs located? (Chest cavity/rib cage)
5. Why do we have lungs? (to breathe, take in oxygen, get rid of carbon dioxide)

Part Two

Using the Internet, diagram, model, reference books and/or posters, compare your model lung to the human lung.

6. Which parts of the model lung represent the lungs?
7. Which parts of the model lung represent the chest cavity?
5. Which parts of the model lung represent the rib cage?
6. Which parts of the model lung represent the diaphragm?

Part Three

Having a cold and some respiratory diseases sometimes causes extra mucus to form in the lungs. To explore the effect this extra mucus has on the lungs, add one spoonful of water to the small balloon inside the bottle. Push and pull on the handle and observe what happens.

7. How does the extra "mucus" affect how much air can be inhaled?
8. How has the added water affected the capability of the lungs to perform correctly?

***Optional for older students: Research several respiratory diseases such as bronchitis, asthma, and emphysema. What is their cause, and how do they affect the lungs and breathing?**