

Assessing your breathing Inquiry

Directions: Write down the purpose and answer any question in this inquiry. Remember to put part of the question in your answer.

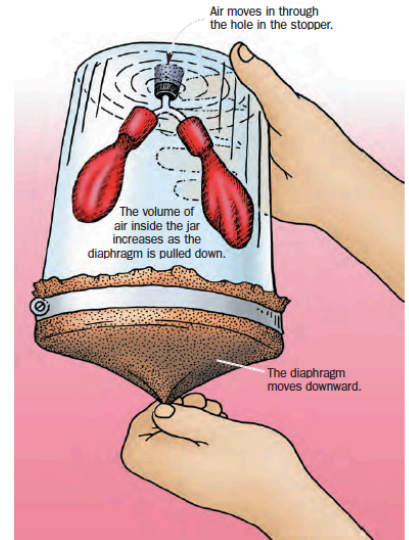
Purpose: How does your diaphragm and lungs work together to help you breath?

Background Information:

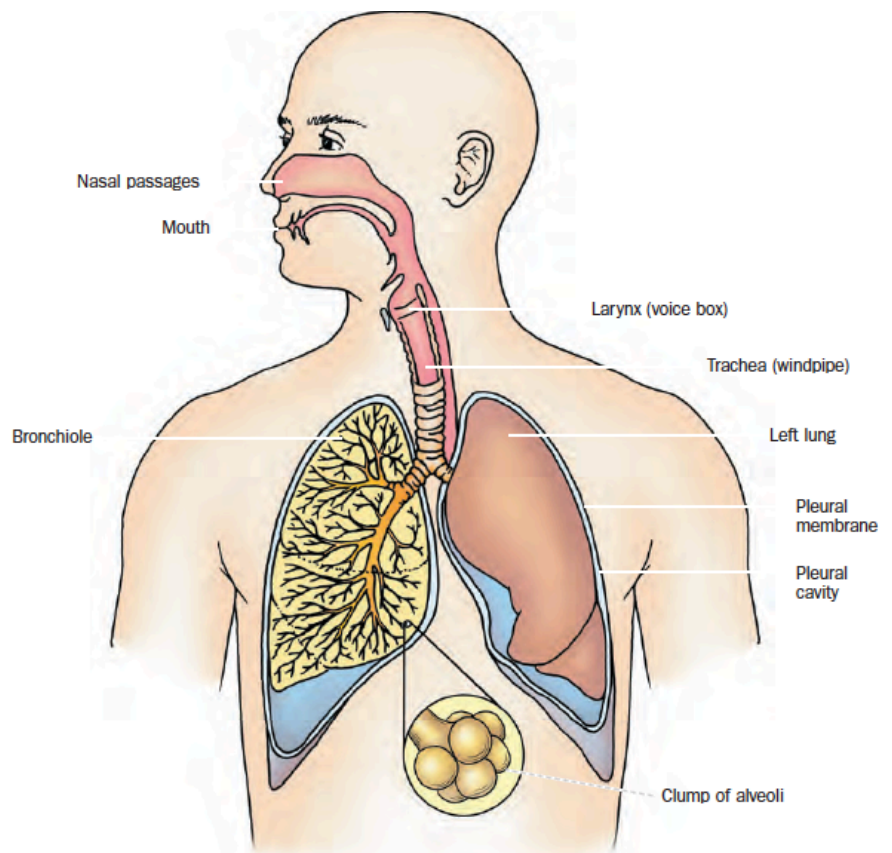
Bell Jar Model

Procedures:

1. Get one of the bell jar models from the teachers desk
2. Examine the bell jar model.
 - a) What happens when you pull down on the rubber piece on the bottom of the model?
 - b) What happens when someone in your group plugs the hole on the top of the model as someone else in your groups pulls down on the rubber? (**Don't** pull with all your strength)
3. Put the model back on the teachers desk
4. Make a T chart like the one below and find multiple strengths (things the model did a good job of) and limitations (things the model does a poor job of) of the bell jar model compared to our real body's respiratory system. (The image of the real respiratory system is the image below. (Think of the Respiratory reading / questions).
5. Show your teacher when you have **completed** all these procedures.



Bell Jar Model	
Strengths	Limitations
1.	1.
2.	2.
3.	3.



Syringe Model

Directions: Write down the purpose and answer any question in this inquiry. Remember to put part of the question in your answer.

Purpose: Design and build a breathing model using a syringe, and balloon.

Procedures:

1. Go to your lab station
2. Answer the following questions about the materials you have: **(Be specific!)**
 - a. What parts of the syringe can be compared with the diaphragm?
 - b. What parts of the syringe can be compared with the mouth?
 - c. What part of the model is the lung?
 - d. What parts of the syringe can be compared with the chest cavity?
3. **Draw** by hand what you think a model of the respiratory system would look like using the materials in the purpose. Think about the questions you just answered.
4. Show your teacher.
5. Try to construct a working model as you have drawn, you may have to change your drawing to fit what your model resembles after (that is ok)
6. Make a T-chart again about the new syringe-breathing model.
7. Show your teacher when you have completed all these procedures.

Syringe Breathing Model	
Strengths	Limitations
1.	1.
2.	2.
3.	3.

