How much air do you breathe?

See how much air you can hold in one breath!

Steps:

1. Breathe in as much air as you can.
2. Exhale out into the balloon and quickly tie the balloon shut.
3. Holding one end of a piece of string, wrap it around the balloon at its widest point.
4. Mark the string where the two ends meet with a pen.
5. Use a ruler to measure the length of string. The string represents the amount of air you breathe out. Write down the length.

____ Student records length of string.

6. Record Data: Keep track of the number of times you breathe in one minute.

____ Student records the number of breaths per minute

7. Compare the length of your string and the number of times you breathed in to those of your group.
   a. Were they the same or different?
   b. Why do you think this is? (possible ans): because everyone has different sized lungs

8. What relationship, if any, can you see between breathing rate and how much air can be held in one breath? (possible ans) a faster rate of breathing usually causes a smaller amount of air to be taken in with each breath.

Name____________________________________ Date____________________
Breathing Differences

1. Ask a question: ________________________________________________________________

2. Form a hypothesis about breathing: (for example) small animals have a higher respiration_
   ___rate since their lungs are smaller______________________________________________

3. Explain how your investigation will test this hypothesis: ____________________________
   _I will count the number of breaths the lizard takes in one minute____________________
   __________________________________________________________
   a) teacher’s approval__________________________________________

4. Conduct the investigation. Write down observations or data collected.
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

5. Write your conclusion: ____________________________________________
   Answer should contain an explanation of why the data supports or rejects the hypothesis.