

Holding My Breath Lab

Purpose: Observe Brain control systems of breathing

Prediction: I can hold my breath for ____ seconds.

Results: with my nose plugged - ____ seconds (room air)

Materials: Background info and plastic bag.

Questions:

1. What do you think causes your brain to restart your breathing? (CSIQ)

Answer question 2 and 3 with one short answer.

2. While breathing into a bag what happens to the CO₂ levels in the bag?
3. CO₂ levels in your lungs, blood and brain?
4. What happens to the O₂ levels in those 4 places? (short answer)

Procedure

1. Fill a bag with air.
2. Seal the bag around your mouth and nose. Get a good seal.
3. Breathe into your bag for 20 seconds. Use the room clock.
4. At the end of the 20 seconds, take a deep breath from the bag and hold your breath while plugging your nose.

Record your results: ____ seconds (plastic bag air)

Question #5. Were your two results different? Explain why or why not.

Data Table

Make a data table using the results of **4 people**. Include the results for normal breath holding and breath holding with a plastic bag.

Explain the results.

What Happens ?

Why ?