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| [DATA1](http://docs.google.com/data1.html)  [DATA2](http://docs.google.com/data2.html)  [DATA3](http://docs.google.com/data3.html)  [DATA4](http://docs.google.com/data4.html)  [DATA5](http://docs.google.com/data5.html)  [DATA6](http://docs.google.com/data6.html)  [DATA7](http://docs.google.com/data7.html)  [DATA8](http://docs.google.com/data8.html)  [DATA9](http://docs.google.com/data9.html)  [DATA10](http://docs.google.com/data10.html)  [DATA11](http://docs.google.com/data11.html)  [DATA12](http://docs.google.com/data12.html)  [DATA13](http://docs.google.com/data13.html)  [DATA14](http://docs.google.com/data14.html)  [DATA15](http://docs.google.com/data15.html)  [DATA16](http://docs.google.com/data16.html)  [DATA17](http://docs.google.com/data17.html)  [DATA18](http://docs.google.com/data18.html)  [DATA19](http://docs.google.com/data19.html)  [DATA20](http://docs.google.com/data20.html) | |  |  |  | | --- | --- | --- | | **MATERIALS USED:**  1) Intermediate Pneuotachomonator  2) 140 "Breathe Right Nasal Strips" (relaxation)  3) Polar Heart Rate Monitor  4) Stop Watch  5) Data Journal  6) 10 moderately massed subjects (129lbs-159lbs)  7) 10 heavily massed subjects (160lbs-190lbs)  8) Comfortable environment (70 degree room temperature)  9) Body Mass Scale  10) Bed with precisely positioned pillows  11) Water  12) Nose cover  13) Texas Instrument Calculator (obtaining random numbers)   |  |  | | --- | --- | | **PROCEDURE:**  1) To make sure the data obtained was random, access the random number generator function on a standard a Texas Instrument calculator. Simple type "RandomInt,10,15,1". This will pull up random numbers between ten and fifteen.  2) Weigh each subject before testing. This will verify his weight requirement to be included in his specific group.  3) Once the subject�s weight is determined, adjust the room, which will be in use for testing, to meet the subject's demands for comfort. (I.e.; temperature, light, air circulation, etc.)  4) Allow the subject to lay down on the bed with the precisely positioned pillows in a back down position  (\*\*) Place the "Breathe Right Nasal Strip" correctly above the bridge of the subject's nose. Make sure the strip is in such a position which enables the subject to feel comfortable.  5) Apply the Polar Heart Monitor. This is to be placed at the underside of the subject�s wrists.  6) Apply the nose cover over the subject�s nose and attach the cover to the Intermediate Pneuotachomonitor. This will ensure the air being inspired through the Intermediate Pneuotachomonitor comes directly from the nasal passage.  7) Ask the subject if he is comfortable. If not, see if anything regarding the step up can be modified to accommodate with the subject�s demands.  8) Fill the Intermediate Pneuotachomonitor with the required amount of water.  9) Let the subject relax for two minutes with the equipment. This will allow the subject to get used to the instruments and will ensure that your subject will be in a relaxed state in the beginning of your testing.  10) Record your tidal volume and heart rate at time 0 seconds to begin the testing.  11) Start the stopwatch  12) Record the subject�s tidal volume and heart rate at the intervals suggested by the random number process. In the mean time, record the total number of breaths taken by the subjects. Multiplying the number of breaths recorded by the random number drawn can do this. This is the respiratory rate and will be essential in determining the total amount of air inspired and expired over a period of time.  13) Repeat step the previous step for thirty minutes  This procedure is to be done once a day for seven days to get a sufficient sample size.  \*\* This step should only be done after obtaining the subjects control data without the strip. This strip will be the explanatory variable in the experiment.  How to interpret the data:  1) Record the daily output of the subject�s data. You will need to average each daily output and record the averages on the *Subject Data Sheet*  2) Repeat this process in order to complete both weekly charts. This will be fourteen sets of data.  3) Perform a "Two-Sample Significance" test to compare the data. ( To obtain the Standard Deviation, simply record the averages in your TI-86 and calculate a "Onevar" statistic test. "Sx" will be the standard deviation used in the calculation)  4) Obtain a percentage value. Assume a no difference was observed at a .1 percentage value and higher.  5) Record the outcomes in the overall chart to draw conclusions. Be sure to do one chart for lightweight and one chart for heavy weight. | | | | |
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