

Name: \_\_\_\_\_ Per: \_\_\_\_\_

## Respiratory System Notes

Primary Functions:

- 1.
- 2.
- 3.
- 4.
- 5.

2 Divisions of the Respiratory System:

Upper Respiratory Tract

- 1.
- 2.
- 3.

Lower Respiratory Tract:

- 1.
- 2.
- 3.

Nose:

Function:

Pharynx:

Larynx:

Trachea:

Bronchial Tree:

Lungs:

### Mechanism of Breathing

Breathing (ventilation):

-  
-

### To understand ventilation you must know that the:

- Visceral pleura adheres to the lung
- Parietal pleura adheres to the inner wall of the thoracic cavity
- Serous fluid in the pleural cavity creates surface tension between the visceral and parietal pleura
- Relationship between volume and pressure
  - **Pressure is inversely proportional to volume ( $P=1/V$ )**
- **Movement of air is from a high pressure to a low pressure**
- Atmospheric pressure = 760 mmHg
  - Pressure outside the lungs

### Inspiration:

Active:

For air to move into the lungs:

To increase size and volume of lungs:

Expiration:

Passive:

For air to move out of the lungs:

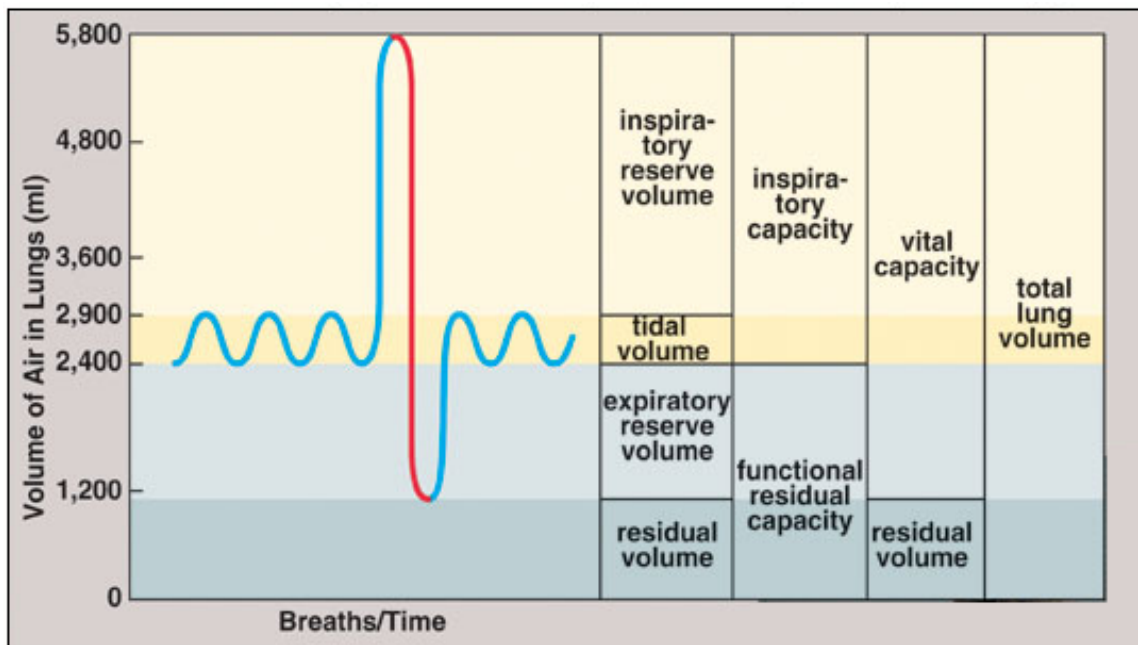
To decrease size and volume of lungs:

Respiratory Volumes:

Spirometry:

Spirometer:

Spirogram:



Tidal Volume (TV)-

Inspiratory Reserve Volume (IRV)-

Expiratory Reserve Volume (ERV)-

Vital Capacity (VC)-

Residual Volume (RV)-

Total Lung Capacity (TLC)-

Gas Exchange and Transport