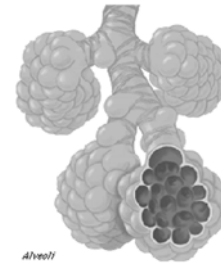


Respiratory System



A crossword puzzle grid with 40 numbered starting points for words related to the respiratory system. The words are:

- 1 THORACIC
- 2 A
- 3 RESPIRATORY
- 4 TIDAL
- 5 BRONCHIOLES
- 6 SURFACTANT
- 7 B
- 8 BRONCHIAL
- 9 NASALCAVITIES
- 10 LUNG
- 11 COLIC
- 12 VITALCAPACITY
- 13 BRONCHITIS
- 14 BRONCHIAL
- 15 PLEURA
- 16 G
- 17 VENTILATION
- 18 INSPIRATION
- 19 EXPIRATORY
- 20 CAROTID
- 21 TRACHEA
- 22 LARYNX
- 23 OXIMETER
- 24 EXPIRATORY
- 25 RESIDUAL
- 26 PHARYNX
- 27 AORTIC
- 28 PHARYNX
- 29 EXTERNAL
- 30 XIPHOID
- 31 DIAPHRAGM
- 32 CAROTID
- 33 EPIGLOTTIS
- 34 INTERCOSTAL
- 35 REDUCED
- 36 ALVEOLI
- 37 NOSE
- 38 INHUSES
- 39 CARBAMINOHEMOGLOBIN
- 40 CELLULAR



Across

1. **THORACIC**—The _____ cavity is where the lungs are located.
6. **SURFACTANT**—Film of lipoprotein that lowers the surface tension and prevents the alveoli from closing.
9. **NASALCAVITIES**—These structures are separated by a septum of bony cartilage (2 words).
10. **LUNGS**—Pair of cone shaped organs.
12. **VITALCAPACITY**—The measure of the maximum amount of air that can move in and out by deep breathing (2 words).
14. **BRONCHI**—Branch off of the trachea to lead to the lungs.
15. **PLEURA**—Name for a very thin serous membrane that covers each lung.
18. **INSPIRATION**—The process of breathing in.
21. **TRACHEA**—Tube that leads to the lungs surrounded by C-shaped cartilage.
22. **LARYNX**—Also known as the "voice box"
24. **EXPIRATORY**—The _____ reserve volume is the amount air expired by contracting the abdominal and internal intercostal muscles.
25. **RESIDUAL**—The air remaining in the lungs even after forced expiration is the _____ volume.
27. **AORTIC**—These bodies are found in the largest artery of the body and detect the level of oxygen in the blood.
28. **PHARYNX**—Funnel-shaped passageway that connects the nasal and oral cavities to the larynx.
29. **EXTERNAL**—This type of respiration occurs between the pulmonary capillaries and the alveoli.
31. **DIAPHRAGM**—Dome-shaped muscle at the base of the thoracic cavity.
32. **CAROTID**—These bodies are found in an artery in the neck and detect the level of oxygen in the blood.
33. **EPIGLOTTIS**—Flap that covers the trachea to prevent food from entering.
34. **INTERCOSTAL**—This word describes both the muscles between the ribs and the nerve that sends impulses to those muscles.
37. **NOSE**—The structure that acts as the major entrance to the respiratory system.
39. **CARBAMINOHEMOGLOBIN**—A small percentage of carbon dioxide is transported to the lungs as this molecule.
40. **CELLULAR**—This type of respiration occurs inside mitochondria and produces ATP.

Down

2. **HARDPALATE**—Bony structure that separates the nasal cavities from the mouth (2 words).
3. **RESPIRATORYCENTER**—The rhythm of ventilation is controlled by this, which is located in the medulla oblongata of the brain (2 words).
4. **TIDAL**—The _____ volume is the small amount of air that moves in and out with each breath.
5. **BRONCHIOLES**—Smaller branches off the bronchi that lead to the alveoli.
7. **BICARBONATE**—This ion is responsible for transporting the majority of carbon dioxide in the body.
8. **INTERNAL**—This type of respiration occurs between the systemic capillaries and body tissues.
11. **SOFTPALATE**—Anterior portion of the structure that separates the nasal cavities from the mouth, does not contain bone (2 words).
13. **INSPIRATORY**—The _____ reserve volume is the amount air brought in by forced inspiration.
16. **GLOTTIS**—Opening to the larynx that allows air to pass the vocal cords and causes them to vibrate.
17. **VENTILATION**—The combination of inspiring and expiring.
19. **SPIROMETER**—Device used to measure the volume of air exchanged during both normal and deep breathing.
20. **CARBONICANHYDRASE**—This enzyme speeds the reaction that transports carbon dioxide as bicarbonate ions (2 words).
23. **OXYHEMOGLOBIN**—98% of oxygen is transported in the body as this molecule.
26. **PHRENIC**—This nerve sends impulses from the respiratory center to the diaphragm.
30. **EXPIRATION**—The process of breathing out.
35. **REDUCED**—_____ hemoglobin acts as a blood buffer, picking up excess hydrogen ions produced during the formation of bicarbonate ions.
36. **ALVEOLI**—Air pockets that are the location of gas exchange in the lungs.
38. **SINUSES**—Air-filled spaces that reduce the weight of the skull and act as resonating chambers for the voice.