Respiratory System Quest

1. All of the following passageways move air to the lungs except for:
   1. Nose
   2. Pharynx
   3. **Alveoli**
   4. Trachea
2. The nose is responsible for all of the following except for:
   1. Purifying the air
   2. Humidifying the air
   3. Warming the air
   4. **Exchanging gases**
3. The cilia inside the nose and throat are responsible for:
   1. Moving mucus to the trachea
   2. **Moving mucus to the esophagus**
   3. Trapping food
   4. Sneeze generation
4. The most superior portion of the pharynx is called the:
   1. Oropharynx
   2. Laryngopharynx
   3. **Nasopharynx**
   4. Palatopharynx
5. Which of the following structures vibrate to create the sound of your voice?
   1. Glottis
   2. Epiglottis
   3. **Vocal cords**
   4. Voice box
6. Which of the following is NOT true of the lungs?
   1. The top of the lung may be referred to the apex
   2. The diaphragm is found below the lungs
   3. **Both lungs have 2 lobes**
   4. They function alongside the cardiovascular system
7. Which of the following is NOT found within the lobes of the lungs?
   1. Bronchioles
   2. Alveoli
   3. **Bronchi**
   4. Capillaries
8. The walls of the alveoli are composed of:
   1. **Simple squamous epithelium**
   2. Simple cuboidal epithelium
   3. Transitional epithelium
   4. Connective tissue
9. Gas exchange occurs through:
   1. Osmosis
   2. Active transport
   3. **Simple diffusion**
   4. Oxygen synthesis
10. Why does a substance called surfactant coat the alveoli?
    1. It functions to increase the speed of gas exchange
    2. It functions to keep the capillaries bound to the alveoli
    3. It functions to digest waste materials in the blood
    4. **It functions to decrease friction and prevent the “sticking together” of the alveoli**
11. Moving air in and out of the lungs is referred to as:
    1. **Ventilation**
    2. Inspiration
    3. Expiration
    4. Gas exchange
12. Which of the following is NOT true of inspiration?
    1. The diaphragm contracts
    2. **The air pressure increases inside your lungs**
    3. Air is forced into the lungs
    4. The rib cage is lifted by the external intercostals
13. Which of the following CANNOT be said of expiration?
    1. The rib cage descends/lowers
    2. **The diaphragm flattens**
    3. Air is forced out of the lungs
    4. It is a passive, effortless process
14. A deep inspiration would also be referred to as:
    1. Coughing
    2. Sneezing
    3. Crying
    4. **Yawning**
15. The total amount of exchangeable air in the lungs is referred to as:
    1. **Vital capacity**
    2. Tidal volume
    3. Inspiratory Reserve Volume
    4. Expiratory Reserve Volume
16. There is a residual volume of air remaining in the lungs because:
    1. **It allows for gas exchange to occur between breaths**
    2. It allows for lungs to be larger than required
    3. It allows for gas exchange to occur more efficiently
    4. Air gets stuck in the alveoli
17. Most carbon dioxide is transported as:
    1. Carbohemoglobin
    2. **Bicarbonate ions**
    3. Carbonic acid
    4. Hydrogen ions
18. Internal respiration would best be described as:
    1. Gas exchange between two people
    2. **Gas exchange between the blood and tissue cells**
    3. Gas exchange between the outside air and the lungs
    4. Gas exchange between tissue cells and alveoli
19. Which of the following does NOT impact respiration?
    1. Physical factors (exercise)
    2. Age
    3. Emotion
    4. **Enzymatic factors**
20. Hyperventilation works to: \*\*INCORRECT
    1. Increase blood pH
    2. **Decrease blood pH**
    3. **Decrease carbon dioxide in the blood**
    4. Decrease oxygen in the blood
21. Emphysema results in the following except:
    1. Less elastic lung tissue
    2. Difficulty breathing
    3. **Mucus buildup in alveoli**
    4. Frequent pulmonary infections
22. Which of the following is NOT true of lung cancer?
    1. Its incidence rate is increasing
    2. It is related to smoking
    3. It has a high death rate
    4. **It has a direct connection to use of e-cigarettes**

Match the following terms to the description. **Write your answer next to the number.**

1. The amount of air that can be forcibly exhaled **B**
2. Normal, quiet breathing **C**
3. The air that enters the respiratory tract and remains in the conducting passageways **A**
4. The amount of air that can be taken in forcibly over the tidal volume **D**
5. The total amount of exchangeable air **F**
6. Air that remains in the lungs even after strenuous respiration **E**

a. dead space volume

b. expiratory reserve volume

c. tidal volume

d. inspiratory reserve volume

e. residual volume

f. vital capacity

g. conducting zone volume

29. How many lobes does the right lung have? The left? Why do they differ?

Right lung has 3 lobes, left lobe has 2. They differ in size to make room for the heart

30. What is the addictive chemical in cigarettes and e-cigarettes?

Nicotine