

## Science 9-Biology Questions on the Breath of Life Video



10

Name \_\_\_\_\_

Due Date \_\_\_\_\_

Show Me  Hand In

*Correct and Hand In Again By* \_\_\_\_\_

### Body Atlas THE BREATH OF LIFE

Watch the video and answer the following questions. If you miss any parts or are unable to answer the question from the video, read chapter 8 pages 154—164.

1. What percent of the chest is filled by our lungs? \_\_\_\_\_
2. How much do **lungs** weigh? \_\_\_\_\_
3. What **area** would the entire surface of all of the alveoli cover if they were flattened out?  
\_\_\_\_\_
4. **How many times more oxygen** is there in air compared to dissolved in water? \_\_\_\_\_
5. **How many breaths** do we take in a lifetime? \_\_\_\_\_
6. **What direction** do muscles pull the rib cage when you **inhale**? \_\_\_\_\_
7. **What direction** does the diaphragm go? \_\_\_\_\_
8. What happens to **muscles** to cause us to exhale? \_\_\_\_\_  
\_\_\_\_\_
9. In one day, how many particles of **pollutants and dirt** do we inhale? \_\_\_\_\_  
What are the **defenses** found in the nose to stop pollutants from entering the lungs and what does each stop?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. What happens to the **mucus** that traps pollutants in the nose?  
\_\_\_\_\_
11. How can we speed up getting **oxygen** into our lungs? \_\_\_\_\_  
\_\_\_\_\_
12. What is the **drawback** to this method of breathing? \_\_\_\_\_  
\_\_\_\_\_
13. What is the **larynx**? \_\_\_\_\_
14. What is the role of the **epiglottis**? \_\_\_\_\_  
\_\_\_\_\_
15. How much of our body is **water**? \_\_\_\_\_
16. How much water **do we breathe out** each day? \_\_\_\_\_
17. What reinforces the **windpipe**? \_\_\_\_\_
18. What are **cilia**? \_\_\_\_\_
19. **How much air** is used in a normal breath? \_\_\_\_\_
20. How much air passes through our lungs in a **lifetime**? \_\_\_\_\_
21. How many **alveoli** do we have? \_\_\_\_\_
22. How does oxygen get from air into **blood vessels**? \_\_\_\_\_
23. How are the tiny blood vessels called **capillaries** arranged at the alveoli? \_\_\_\_\_  
\_\_\_\_\_
24. What carries **oxygen** around in the blood? \_\_\_\_\_
25. Why is **hemoglobin** necessary? \_\_\_\_\_  
\_\_\_\_\_
26. Could we survive without **hemoglobin**? \_\_\_\_\_

27. Where is the **hemoglobin** located? (Be specific) \_\_\_\_\_
28. Why is hemoglobin **not necessary** to carry CO<sub>2</sub> back to the lungs? \_\_\_\_\_
29. **How long**, on average, can we go without oxygen before blacking out? \_\_\_\_\_
30. What type of cells are most sensitive to a **lack of oxygen**? \_\_\_\_\_
31. Can you hold your breath until you **die**? \_\_\_\_\_
32. Why can't a scuba diver stay down as long when **diving deep** as they can on a shallow dive with the same air tank? \_\_\_\_\_
33. How does a **space suit** get rid of CO<sub>2</sub>? \_\_\_\_\_  
\_\_\_\_\_
34. How do **cilia** remove mucus? \_\_\_\_\_  
\_\_\_\_\_
35. What are the tubes that branch from the **trachea** called? \_\_\_\_\_
36. What is the **nasal cavity**. \_\_\_\_\_
37. What are **bronchioles**? \_\_\_\_\_  
\_\_\_\_\_