

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 CO₂ 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 CO₂? _____
- _____
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**? _____
- _____