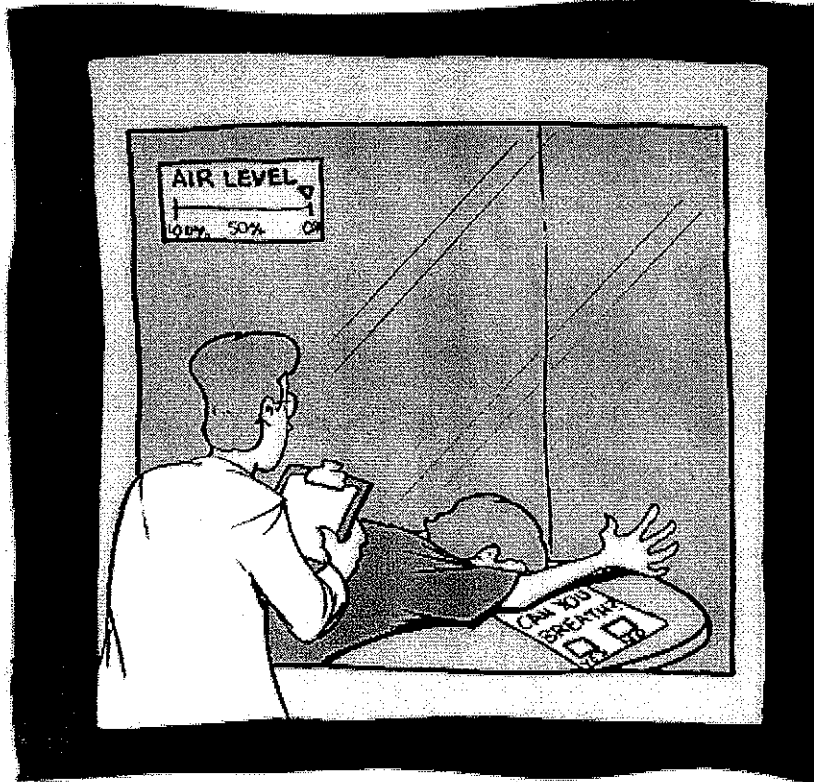


## Science 8

### Life Science Unit Re-Test

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

1. You have the whole block to write the test.
2. You may use a 1 pg handwritten "cheat sheet" to assist you.
3. You may not use other notes or the textbook during the test.
4. You must write in pen or pencil.
5. Please answer all questions.



Once again, our study proved inconclusive.

## Section 1: Fill in the Blank

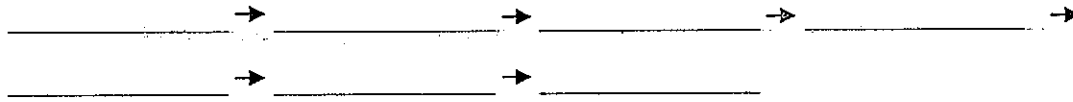
Use the following words to fill in the blanks; each word will be used only once, some words will not be used at all:

alveoli	diaphragm	nucleus	small intestine
allergy	diffusion	osmosis	stimulus
antibody	duodenum	peristalsis	stomach
artery	epiglottis	plasma	vaccine
capillary	esophagus	platelet	vein
cell membrane	eukaryotic	prokaryotic	virus
cell wall	lysosome	protein	white blood cell
chloroplast	large intestine	red blood cell	
cytoplasm	mitochondria	ribosome	

1. The smallest type of blood vessel is called a(n) \_\_\_\_\_.
2. The type of blood vessel which carries blood away from the heart is a(n) \_\_\_\_\_.
3. A(n) \_\_\_\_\_ is anything which causes a living thing to respond.
4. The \_\_\_\_\_ is the outermost layer of plant cells.
5. The organelle which converts energy from the sun into glucose is a(n) \_\_\_\_\_.
6. Plant and animal cells are examples of \_\_\_\_\_ cells.
7. A non-living thing which tricks the host cell into reproducing it is called a(n) \_\_\_\_\_.
8. The jellylike substance inside cells is called \_\_\_\_\_.
9. The movement of particles from an area of high concentration to an area of low concentration is \_\_\_\_\_.
10. The muscle which causes you to breath is called the \_\_\_\_\_.
11. The flap of skin which prevents food from entering the trachea is called the \_\_\_\_\_.
12. In the lungs there are tiny air sacs in which gas exchange occurs, they are called \_\_\_\_\_.
13. The component of blood which carries oxygen and carbon dioxide is called a(n) \_\_\_\_\_.
14. The component of blood which fights infections is called a(n) \_\_\_\_\_.
15. The first meter of the small intestine is called the \_\_\_\_\_.
16. The \_\_\_\_\_ is mainly responsible for re-absorbing water into the body.

17. Put in the order that foods goes through the digestive system:

mouth, stomach, esophagus, large intestine, small intestine, duodenum, anus



7

**Section 2. Matching:**

18. Match each step of the scientific method with a description of it (see example)

A:EXAMPLE	Test your prediction	
C: Observation	Determine if your hypothesis was supported or not.	
D: Hypothesis	EXAMPLE	A
E: Prediction	Think of one specific testable thing which would be true if the hypothesis was correct.	
F: Experiment	Choose a topic, do some research.	
B: Conclusion	An educated guess.	

5

19. Match each function with the organelle which performs it. There are more organelles than functions.

A: Surrounds cell and controls what gets in and out	Cell wall	
B: Sorts proteins into vesicles	Cell membrane	
C: Controls activities in the cell	Chloroplast	
D: Storage compartment	Nucleus	
E: Cleans the cell	Vacuole	
F: Produces proteins	Ribosome	
G: Produces energy	Vesicle	
	Golgi body	
	Lysosome	
	Mitochondrion	

7

20. Match each body system's function with its name, there are more body systems than functions.

A: Creates a waterproof barrier around the body	Nervous System	
B: Defends body against infections	Circulatory System	
C: Produces children	Digestive System	
D: Detects changes in the environment and signals these changes to the body which then carries out a response	Respiratory System	
E: Takes in food, breaks it down, absorbs nutrients and eliminates solid waste.	Muscular System	
F: Makes and releases hormones	Excretory System	
G: Removes liquid and gas wastes from the body	Immune System	
F: Transports blood	Endocrine System	
	Reproductive System	
	Integumentary System	
	Skeletal System	

**Section 3: Short Answer**

21. List the 3 concepts of cell theory:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

18

22. List the 5 types of nutrients the body needs:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13

23. List the 4 ways you can receive an infectious disease:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

15

14

24. List the 5 characteristics of living things and give an example of each.

Characteristic	Example

25. Give two examples of selectively permeable membranes

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26. A cell, which is composed of 70% water, 10% dissolved sugar, and 15% dissolved salts, is put in a beaker which contains a solution which is 60% water, 15% dissolved sugar and 25% dissolved salts. What will happen in terms of osmosis and diffusion if the cell membrane is permeable to water, sugar, and salts.

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27. Explain the how active immunity is created.

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2

28. Explain why transplanted organs can be "rejected."

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1

29. Create a diagram of the respiratory system with **diaphragm, lungs, epiglottis, trachea, bronchi, bronchioles** and **alveoli** labeled.

A large, empty rectangular box intended for drawing a diagram of the respiratory system.

17

**Section 4: Bonus, attempt only after all other questions have been completed.**

30. Recently some scientists have mutated the bird flu virus in such a way that it would be highly infectious (and deadly) to people. They did the research so that we would be prepared if the virus naturally mutated that way. The scientists wanted to publish the method they used so other scientists could use it and do research on the flu but were not allowed to because the US government was worried terrorists would use the information. Do you think the government was right, or is getting the scientific information out worth the risk? Do you think the research should have been done at all?

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