## Q1W1-Bio-G10-H.W

## Matching

Match each item with the correct statement below.

- a. adaptation d. homeostasis
- b. control

- e. hypothesis
- c. evolution f. reproduction
- \_\_\_\_\_ 1. The process whereby an organism produces more of its own kind
- 2. The part of an experiment against which results are compared
- \_\_\_\_\_ 3. An organism's tendency to maintain a stable internal environment
- 4. Any structure, behavior, or internal process that enables an organism to better survive in an environment
- 5. A testable explanation for a question or problem
- 6. The gradual change in the characteristics of a species over time

Match each item with the correct statement below.

- a. developmentd. evolutionb. adaptatione. reproduction
- c. homeostasis f. environment
- \_\_\_\_\_ 7. The gradual change in the characteristics of a species over time
- 8. The living and nonliving factors in an organism's surroundings
- 9. Any structure, behavior, or internal process that enables an organism to better survive in an environment
- \_\_\_\_\_ 10. An organism's tendency to maintain a stable internal environment
- \_\_\_\_\_ 11. The series of changes that an organism undergoes during its lifetime
- \_\_\_\_\_ 12. The process whereby an organism produces more of its own kind

## **Modified True/False**

Indicate whether the statement is true or false.

- \_\_\_\_\_ 13. The <u>liter</u> is a metric unit of volume. \_\_\_\_\_\_
- \_\_\_\_\_ 14. For ease of understanding, scientists report measurements using the English system.
- \_\_\_\_\_ 15. Whether applications of science to everyday life are considered good, bad, right, or wrong comes under the category of <u>technology</u>. \_\_\_\_\_\_
- 16. Counts or measurements are examples of data produced by <u>descriptive</u> research.
- 17. In an experiment, the <u>control</u> group is used to test the effect of the independent variable.
- 18. A <u>natural law</u> is based on the analysis of data collected in a controlled experiment.
- \_\_\_\_\_ 19. A <u>law</u> is a possible explanation for a scientific question.
- 20. A <u>centrifuge</u> is used to make small details of an object visible to a scientist.

## **Multiple Choice**

Identify the choice that best completes the statement or answers the question.

 21.	. The theme that reflects the idea that there has been a g	gradual change in the characteristics of species over time		
	IS	production		
	b unity within diversity d. ev	volution		
22	2. Living things adjust to a stimulus by a reaction called $a(n)$			
 	a. environment c. ho	omeostasis		
	b. growth spurt d. re	esponse		
23.	B. Living things change during their lives through			
	a. reproduction c. m	aking responses		
	b. growth and development d. ad	daptation and organization		
 24.	All living things to make more living things.			
	a. reproduce c. gr	row		
	b. develop d. ad	dapt		
 25.	Which of the following are likely topics for a course in biology?			
	a. Why does the Texas horned lizard squirt blood out of its eyes?			
	b. How is a banded pipefish able to hide in its environment of seaweeds?			
	c. What chemicals cause plant stems to lengthen or flowers to bloom?			
0.6	d. All of these.	1.1.1.		
 26.	b. Questions about living things that can be answered by	biologists are		
	a. what c. no	0W Lof these		
27	U. Why $U$ . all $U$ . Why $U$ is learning shout the	i of these		
 21.	a rocks	 pemicals		
	b life around us d all	l of these		
28	Living things do not adapt to their surroundings by			
 20.	a making adjustments to nonliving factors around them			
	b. maintaining a steady internal environment			
	c. responding to other organisms			
	d. building on previous knowledge			
 29.	. Which statement is incorrect? As an organism develop	)S,		
	a. it produces more of its own kind			
	b. it takes on the characteristics of a particular species			
	c. its amount of living material increases			
	d. different parts grow at different rates			
 30.	). The study of standards for what is right and what is wr	rong is called		
	a. pure science c. et	hics		
	b. applied science d. te	chnology		
 31.	. The information gathered from experiments is called _			
	a. the data c. the	e nypomesis		
22	b. the research d. the	$p_{\rm eff}$ a hypothesis is $q(\mathbf{n})$		
 32.	a principle	est a hypothesis is $a(h) \$		
	b. theory d. ex	xperiment		
33	The application of science to the needs and problems of	of society is		
 55.	a. quantitative research c. de	escriptive research		
	b. technology d. pu	ure science		

	34.	A scientific explanation of known facts arrived a. theory	at th c.	nrough repeated testing over time is a(n) natural law
		b. observation	d.	experiment
	35. The part of an experiment in which all conditions are kept the same is the			re kept the same is the
		a. hypothesis	c.	conclusion
		b. control	d.	independent variable
	36.	36. The steps commonly used by scientists in gathering information to test hypotheses and solve problems are called		
		a. descriptive research	c.	scientific methods
		b. pure science	d.	applied science
	37. A testable explanation for a question or problem is a(n)			
		a. experiment	c.	observation
		b. hypothesis	d.	verifiable law
	38.	Knowledge gained by scientific research		
		a. can always be used to provide monetary benefits for humans		
		b. always raises social, ethical, and moral concerns		
	c. is never inherently good or bad			
	d. never results in data that can be applied to solve problems			
	39. Technology has allowed humans to produce more food and reduce the chance of starvation by indivi			ood and reduce the chance of starvation by individuals in
	some countries. How has this advance created additional technological needs? a. The technology has allowed populations to continue to grow, creating the need for additional food			
		b. The technology caused salts to be deposited in soils.		
		<ul><li>c. The technology caused the false belief that the problem was solved forever.</li><li>d. All of these.</li></ul>		
	_ 40. Why is the hypothesis that black cats cause bad luck not science?			
	a. The results of studying the hypothesis are not repeatable.			epeatable.
b. The results of studying the hypothesis are open to judgment.			to judgment.	

- c. The hypothesis cannot be tested by controlled experiments.d. All of these.