



## FIRST QUARTERLY ASSESSMENT

### SCIENCE 8

Prepared by: Ms. Julie Ann P. Robles

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

Score: \_\_\_\_\_ /70

Grade and Section: \_\_\_\_\_

Date: \_\_\_\_\_

**IMPORTANT REMINDER:** Following instructions is part of the exam. Failure to follow instructions will cause a **5-point-deduction** from the total raw score.

**I. Number the following to show the sequence of the circulation of blood in the body. (10 pts.)**

**“Deoxygenated blood enters the heart thru:**

- |  |                                |
|--|--------------------------------|
| _____ 1. left ventricle                  | _____ 6. lungs                 |
| _____ 2. pulmonary artery                | _____ 7. right atrium          |
| _____ 3. Superior and inferior vena cava | _____ 8. all parts of the body |
| _____ 4. left atrium                     | _____ 9. aorta                 |
| _____ 5. right ventricle                 | _____ 10. pulmonary vein       |

**II. Multiple choice. Choose the best answer and write the capital letter on the space before each number.**

- \_\_\_\_\_ 11.) What body structure protects the lungs from physical injury?  
A. Cartilage      B. Tiny sac      C. Rib cage      D. Diaphragm
- \_\_\_\_\_ 12.) What part of the blood carries minerals, vitamins, sugar and other nutrients to the body's cells?  
A. Plasma      B. Platelets      C. Red blood cells      D. White blood cells
- \_\_\_\_\_ 13.) Which of the following is a function of the respiratory system?  
A. gas exchange      B. transport of oxygen  
C. absorption of nutrients      D. structural support
- \_\_\_\_\_ 14.) Which among the following statements is/are correct?  
1. Arteries have thinner walls compared to veins.  
2. Pulmonary vein carries blood from the lungs back to the heart.  
A. 1 only      B. 2 only      C. Both 1 and 2      D. Both are wrong
- \_\_\_\_\_ 15.) Which of the following blood components is responsible for fighting diseases and gets rid of dead or dying blood cells and foreign matter?

- A. Capillaries
- C. White blood cells

- B. Red blood cells
- D. Platelets

**III. Complete the sentence with the correct word or phrase. (10 pts)**

16. The \_\_\_\_\_ blood cells seek out, identify and bind with alien protein in bacteria, viruses and fungi so that they can be removed.
17. The human heart has \_\_\_\_\_ chambers and is about the size of a \_\_\_\_\_.
18. Deoxygenated blood is rich in \_\_\_\_\_ gas and its color is dull red.
19. The \_\_\_\_\_ is a sheet of muscles that lies across the bottom of the chest cavity.
20. The human heart has an average weight of \_\_\_\_\_.
21. Type O blood is also known as \_\_\_\_\_.
22. \_\_\_\_\_ circulation supplies blood to all the body except to the lungs.
23. The \_\_\_\_\_ separates the right and left sides of the heart.
24. \_\_\_\_\_ are sacs inside the lungs where exchange of gases happen.
25. \_\_\_\_\_ refers to the observable physical properties of an organism; these include the organism's appearance, development, and behavior.

**IV. Analyze the table below. Write YES if the blood types are compatible and NO if not.**

	DONOR	RECIPIENT
26.	AB-	O-
27.	B+	AB-
28.	O+	O-
29.	A-	A+
30.	O-	AB+
31.	A+	AB+
32.	O-	B-
33.	B-	AB-

**IV. Solve the following genetic problems below:**

34-35. Examine the following Punnett squares and put a check to those that are correct.

	D	d		D	D		A	a		A	a	
d	Dd	dd		d	Dd	DD	A	AA	aa	a	Aa	aa
d	Dd	dd		d	Dd	Dd	a	Aa	Aa	a	Aa	aa

\_\_\_\_\_

For each of the genotypes below, determine the phenotype.

36. Purple flowers are dominant to white flowers

PP (genotype) \_\_\_\_\_ (phenotype)

Pp (genotype) \_\_\_\_\_ (phenotype)

37. Brown eyes are dominant to blue eyes

Bb (genotype) \_\_\_\_\_ (phenotype)

bb (genotype) \_\_\_\_\_ (phenotype)

Give three examples for each:

38. Homozygous dominant

\_\_\_\_\_

39. homozygous recessive

\_\_\_\_\_

**Answer the following in a piece of paper. Take a picture of your work and send it in my messenger account (Joanne Robles)**

40-43. In dogs, the allele for long fur is dominant and the allele for short fur is recessive. Cross a homozygous dominant dog with a dog with short fur.

45-48. In humans, brown-eyed allele (B) is dominant over blue-eyed allele (b). If two heterozygous humans mate, what will be the likely genotypic and phenotypic ratio of their offspring?

V. Set up the Punnett squares for each of the crosses listed below. Round seeds are dominant to wrinkled seeds.

A. P1- Rr      P2- Rr

49. What percentage of the offspring will be round? \_\_\_\_\_  
 50. What percentage of the offspring will be homozygous recessive? \_\_\_\_\_  
 51. What percentage of the offspring will be heterozygous? \_\_\_\_\_


B. P1 - Rr      P2 - rr

52. What percentage of the offspring will be round? \_\_\_\_\_  
 53. What percentage of the offspring will be wrinkled? \_\_\_\_\_  
 54. What percentage of the offspring will be heterozygous? \_\_\_\_\_  
 55. What percentage of the offspring will be homozygous recessive? \_\_\_\_\_


VII. Look at the pictures below and explain in 2-3 sentences if it promotes a healthy circulatory and respiratory system or not.

56-58.



59-61.



62-64.



VIII. In 1-2 sentences, explain the importance of the following topics that we discussed in your life.

65-66. Blood types

67-68. Heredity

69-70. Air pollution

**\*\*\*END OF EXAM\*\*\***