



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.



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59-61.



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62-64.



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- 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*****