

## Science Grade 6 Practice questions

**Term 2. 2023-2024**

**Name:**

**Class:**

### Paper based:

1. You are given a cell sample of a plant, animal, and a non-living thing. What characteristics can you observe under a microscope to differentiate between the three?

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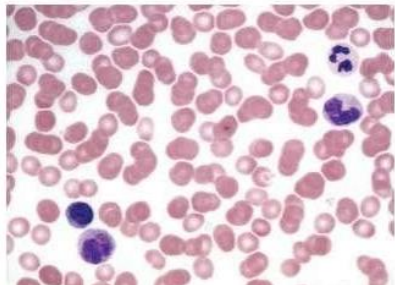


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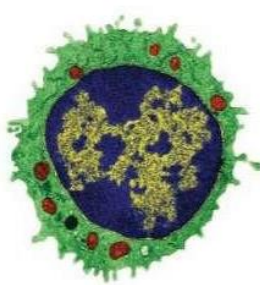


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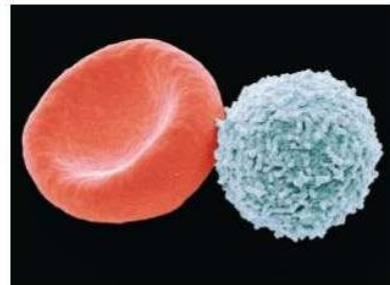
2.



**A**



**B**



**C**

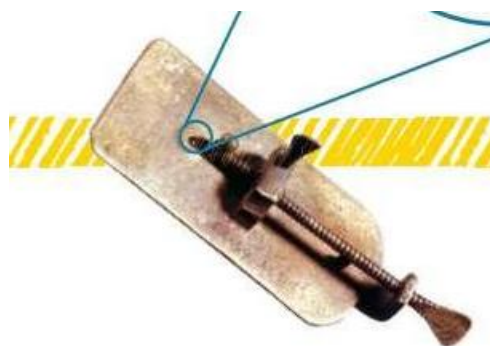
Identify the microscopes used to obtain the above images of cells. Describe the characteristics of the microscopes identified.

Image	Microscope	Characteristics	Magnification
A			
B			
C			

3. Complete the table below based on cell theory and give one example on each.

Cell theory principle	Example

4. Identify the image in the right and describe the magnification in provided.



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5. Based on the number of cells, identify the organisms.

Amoeba	
	
Mouse	
Human	
Blue whale	

**6. What do you notice about the scale, proportion, and quantity of cells in unicellular and multicellular organisms?**

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**7. Explain the seven characteristics of living organisms.**

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**8. What structures surround a cell, and how do these structures help a cell function?**

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**9. Write one characteristic of cell membrane that lets it protect your cell.**

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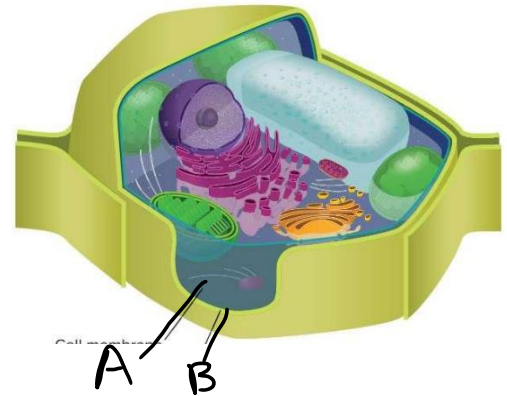
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**10. List three functions of cell wall.**

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11. Label the parts of the cell in the image and write their function.



	Name	Function
A		
B		



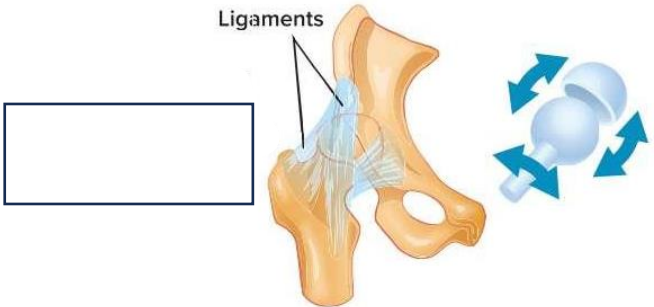
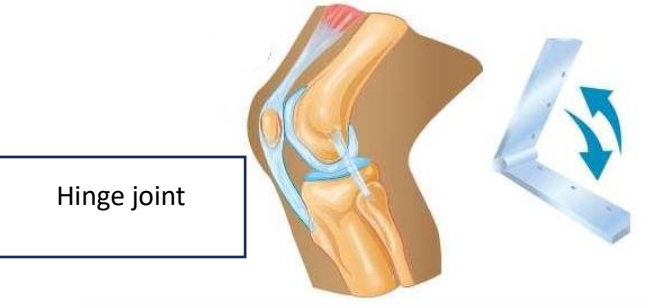
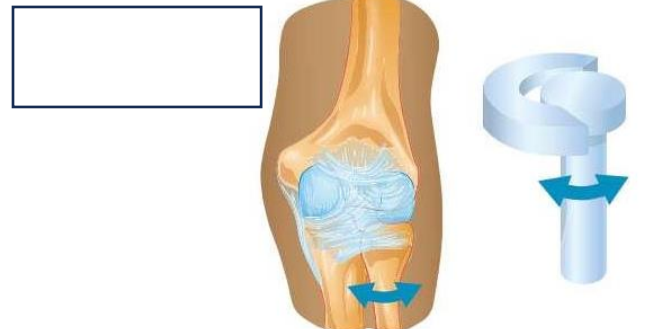
12. Complete the table below based on the functions of the organelle.

Organelle	Function
	Makes protein
Rough _____ reticulum	
Smooth _____ reticulum	
	Sac like structures. Functions:
Golgi apparatus	
Vesicle	
Lysosome	

13. Fill the table below.

	Name	Function
		
		

14.

Types of Movable Joints			
Joint		Description	Example
 <div style="border: 1px solid black; width: 150px; height: 40px; margin-top: 10px;"></div>			
 <div style="border: 1px solid black; width: 150px; height: 40px; margin-top: 10px; display: flex; align-items: center; justify-content: center;">             Hinge joint           </div>			
 <div style="border: 1px solid black; width: 150px; height: 40px; margin-top: 10px;"></div>			

15. Complete the table below based on how skeletal system is important.

Protection	
Production	
Storage	

16. Use an argument to support or refute this statement. Your body would be able to function without your skeletal system.

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17. Complete the below table based on the skeletal system of these organisms.

	Name	Skeletal system	Define.
			
			

18. Explain why muscle cells have more mitochondria.

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19.

The figure below represents the digestive system. Study it and answer the following questions:

- Which part secretes acidic fluids to digest food?

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- Which part has Villi features that absorb food?

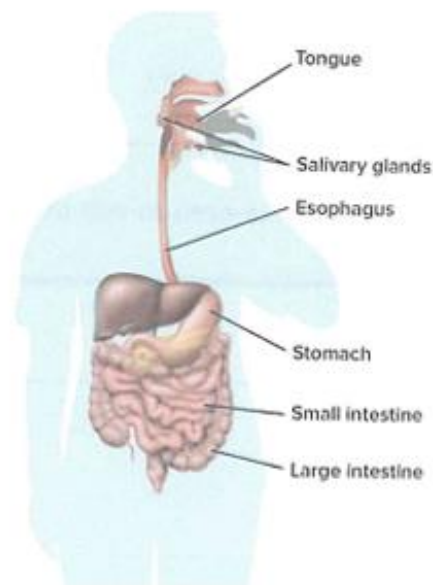
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- Which part undergoes peristalsis movement and pushes food into the stomach?

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- Which part in your mouth secretes chemicals that break down carbohydrates?

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20. Explain how the different body systems were involved in the digestion of a bread.

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21. Describe two functions of stomach.

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22. Complete the table below based on how the body systems are involved in excretion.

Body systems	Function
Respiratory system	
Skin	
Urinary system	

23. Bean shaped organ that filter or remove waste from blood is \_\_\_\_\_.

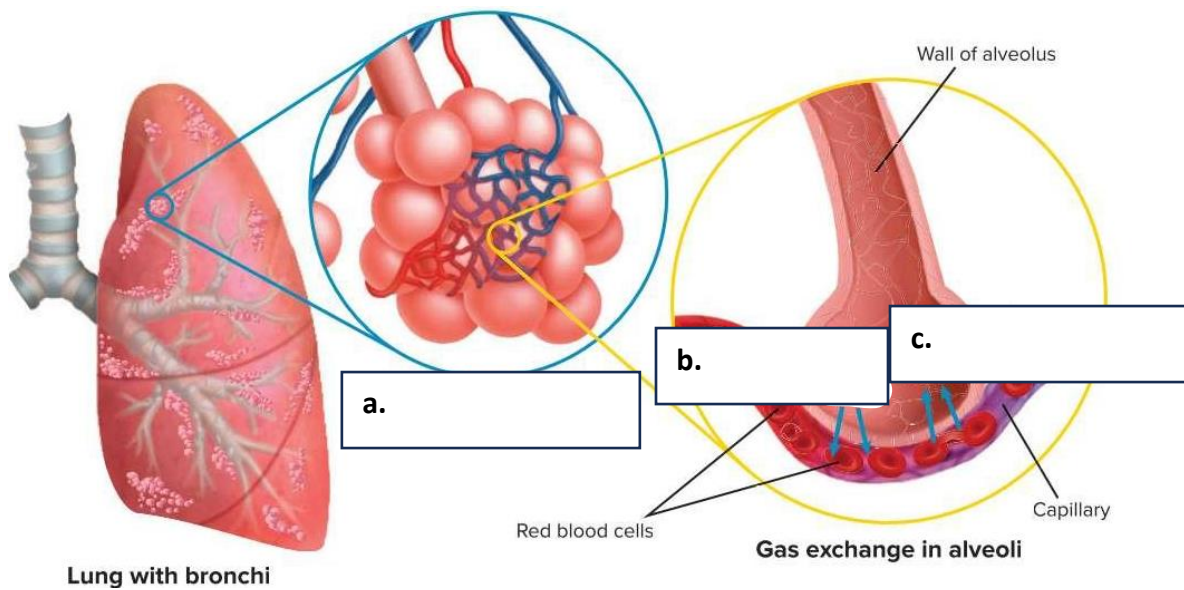
24. Explain what would happen if your kidneys do not function?

25. Complete the boxes below based on how air flows in the respiratory system.

Oxygen → \_\_\_\_\_ → Pharynx → \_\_\_\_\_ → \_\_\_\_\_ → Bronchioles → \_\_\_\_\_

26. How is your diaphragm involved in inhalation and exhalation?

27.



28. Your friend says that blood has a role in breathing. Would you support or refute to his claim? Explain?