

Name: _____

Date: _____

Period: _____

Unit 3 & 9 Week Test Review: Cell Structure and Biomolecules

By the end of class, check the ones you feel confident on and study the others at home.

1. ___ List the levels of organization in an organism from cell to organism
2. ___ Identify types of cells (prokaryote or eukaryote)
3. ___ Label prokaryotic and eukaryotic cell structures
4. ___ Identify differences in plant, animal and bacterial cells

Levels of organization: (simplest to complex)

1. Organelles -> _____ -> _____ -> _____
-> _____ -> _____

Word bank for #1

Tissue	Organism	Organs
Cells	Organ System	

2. You discover a blue mark on your body after a long day. When you press on the mark, it is painful. You decide that this mark is probably a bruise from when you were playing with friends. Using this information, answer the following.
- a. Your skin would be classified in which organizational level? _____
 - b. For your skin to heal, what are the levels of organization that need to be part of the healing process?



3. Tell me one way you can tell this is not a plant cell?
4. Tell me one way you can tell this is not a bacteria cell?
5. a. What is the difference between a prokaryote and eukaryote?
b. What is the difference between a plant and animal cell?
6. How are bacteria and prokaryotes related?
7. Do prokaryotes have a nucleus?

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8. What is the job of mitochondria in plant and animal cells?

- A) to control what enters the cell
- B) to break down wastes
- C) break down food for energy
- D) Instruct ribosomes to make proteins

9. Which organelle is **not** membrane bound (surrounded by a membrane) and is found in prokaryotes?

- A) mitochondria
- B) lysosomes
- C) Golgi apparatus
- D) ribosomes

10. What do ALL cells have in common?

- A) nucleus
- B) genetic material, DNA
- C) ability to move
- D) ability to make energy

11. What organelle can be found in both plants and prokaryotes (bacteria), but not animal cells?

- A) cell wall
- B) cell membrane
- C) cytoplasm
- D) ribosome

12. If looking at a unicellular organism under the microscope, how would you know it is NOT a prokaryote?

- A) it would have ribosomes
- B) it would have a cell wall
- C) it would have a nucleus
- D) it would have DNA

13. Why must ALL cells, prokaryotes and eukaryotes, have ribosomes?

14. What two cell organelles have their own DNA and support the theory of endosymbiosis?

15. Which organelle creates energy for plant cells only?

16. Which organelle creates energy for both plants and animal cells?

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17. Circle all the organs below:

Bone

Skeleton

Heart

Kidney

Skin cell

Skin

Tissue

Bacteria

18. How does DNA code for traits in an organism?

19. How does DNA compare in all living things?

20. Which biomolecule is for insulation?

21. Which biomolecule is for immediate (quick) energy?

22. Which biomolecule is for building cells, tissue and muscle?

23. What are polymers made of?

24. Which biomolecule is formed by chains of amino acids?

25. Which biomolecule is formed by saccharides?

26. Enzymes are in which biomolecule group?

27. Which biomolecule is for long term energy storage?

28. Which biomolecule is for genetic information?

29. Which biomolecule contains instructions for making proteins?

30. Small subunits of polymers are called _____.