

ORANGE PUBLIC SCHOOLS
OFFICE OF CURRICULUM AND INSTRUCTION
OFFICE OF SCIENCE

GRADE 7th SCIENCE

Pre - Assessment



School Year 2014-2015

Directions for Grade 7 Pre-Assessment

The Grade 7 Pre-Assessment is made up of multiple choice questions, constructed response questions and performance questions.

Read each question carefully, including diagrams and/or graphs. Work as rapidly as you can without sacrificing accuracy. Do not spend too much time puzzling over a question that seems too difficult for you. Answer the easier questions first; then return to the harder ones. Try to answer every question, even if you have to guess.

Where necessary, you may use scratch paper for your work. Do not use the margins of the test booklet to do scratch work.

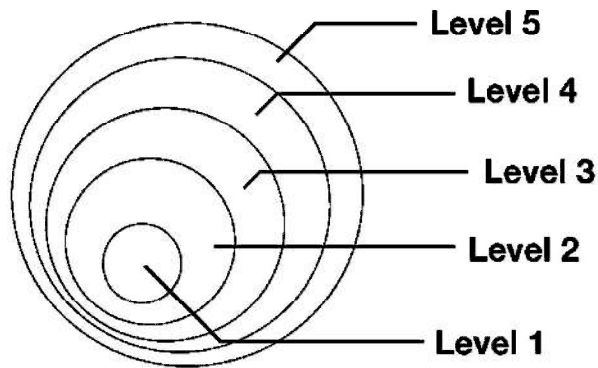
FOR ALL QUESTIONS, YOU MUST RECORD ALL OF YOUR ANSWERS ON THE TEST BOOKLET.

Name _____ Date _____

Unit 1 Pre-assessment

Matching:

For questions 1-5 use the graphic below.



Match the level of organization of living things with their place in the biosphere.

- | | |
|----------------|----------------|
| a. biospheres | individual |
| b. communities | d. organisms |
| c. ecosystems | e. populations |

____ 1. level 1

____ 2. level 2

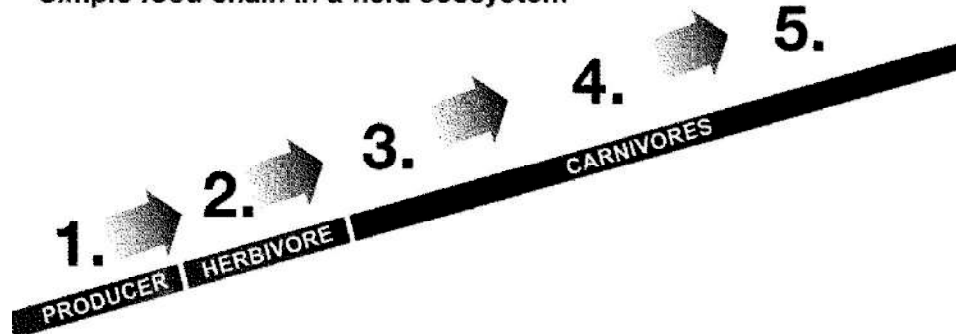
____ 3. level 3

____ 4. level 4

____ 5. level 5

For questions 6-10 use the graphic below.

Simple food chain in a field ecosystem



Match the following living things with their place in the food chain.

- | | |
|----------------|----------|
| a. hawk | d. snake |
| b. frog | e. grass |
| c. grasshopper | |

- ___ 6. producer
- ___ 7. herbivore
- ___ 8. carnivore
- ___ 9. carnivore
- ___ 10. carnivore

Short Answer

11. Explain how ecosystems, communities, and populations in the biosphere relate to each other.

12. Describe the process of photosynthesis. Be sure to explain what is needed for this process and what is produced.

Modified True/False

Indicate whether the statement is true or false. If false, change the identified word or phrase to make the statement true.

13. All living organisms are made up of two or more cells. _____

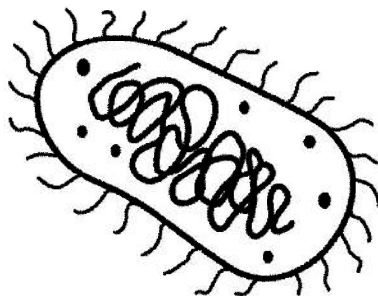
14. Organelles are found in the cytoplasm of a cell. _____

15. The very outside layer of the animal cell is the cell membrane.

16. Cell walls are only found in animal cells. _____

Short Answer

17. Is the cell in the diagram a **prokaryotic cell** or a **eukaryotic cell**? Compare prokaryotic cells and eukaryotic cells. In your answer use the terms *nucleus*, *organelles*, and *DNA*. Give examples of the types of cells that are prokaryotic and the types of cells that are eukaryotic



18. Explain why a muscle cell would have more **mitochondria** than a skin cell?

19. Although plant cells and animal cells have many of the same parts, they are different. Explain **3 differences** between a plant and animal cell.

Completion

Complete each statement.

*Select the correct term to complete each sentence. There are extra terms in the list.
Some terms may be used more than once.*

diffusion	larger	equal
active transport	osmosis	mitochondria
cellular respiration	photosynthesis	chloroplasts
electromagnetic spectrum	color	chlorophyll
ATP	nucleus	products
cell membrane	microlight waves	reactants

20. A cell is protected from the environment by its_____.

21. The diffusion of water across the cell membrane is called_____.

22. Molecules can move across the cell membrane from lower to higher concentrations during _____.
23. The process of making energy that the cell can use is known as cellular _____.
24. The process during which green plants use sunlight to make food is _____.
25. Photosynthesis occurs in the _____ of plant cells.