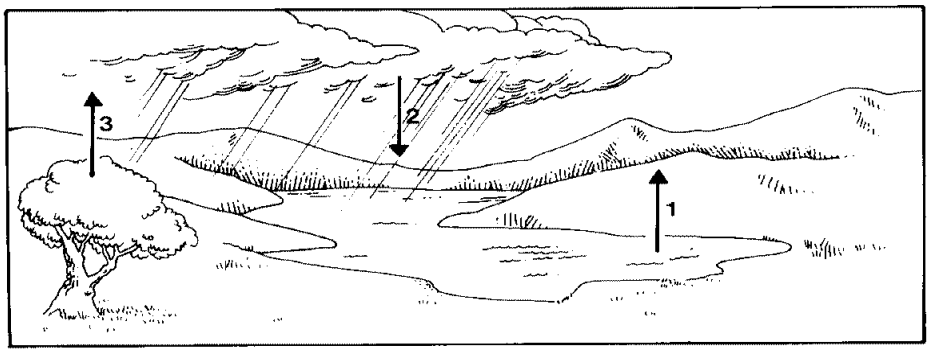
CH 2.2, 2.3, & Everglades

DO NOT WRITE ON THIS TEST. WRITE ANSWERS ON NOTEBOOK PAPER.

Multiple Choice
Identify the choice that best completes the statement or answers the question.(3 points)

____ 1. Which of the following is NOT one of three factors that control the balance of an ecosystem?
a. producers
b. decomposers
c. consumers
d. solar energy



____ 2. In the diagram above, the process that must occur **before** the process labeled 2 can occur is called
a. transpiration.
b. precipitation.
c. condensation.
d. evaporation.

____ 3. The process represented by arrow 3 in the diagram above is
a. transpiration.
b. precipitation.
c. condensation.
d. evaporation.

____ 4. Because Earth's interior is warmer than its surface layers, hot materials move toward the surface in a process called
a. energy balancing.
b. convection.
c. energy transfer.
d. rotation.

____ 5. According to the law of gravitation, the force of attraction between two objects depends on the masses of the objects and the
a. distance between them.
b. composition of each object.
c. size of each object.
d. magnetic field of each object.

____ 6. What is produced when carbon is combusted or burned?
a. methane
b. calcium carbonate
c. fossils
d. carbon dioxide

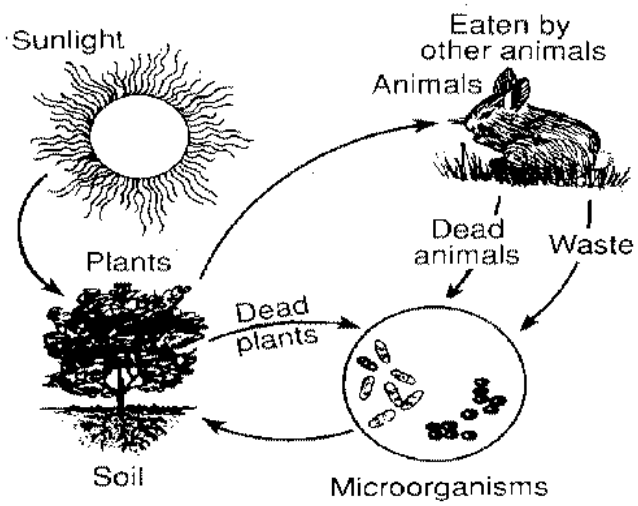
____ 7. The carrying capacity of an ecosystem is
a. the time it takes to complete a cycle in the ecosystem.
b. the number of organisms that are active in an ecosystem.
c. the largest population that an ecosystem can support at one time.
d. the natural resources available at one time in an ecosystem.

____ 8. What is the indepedent variable in the question. "How do exotic species affect the food chain the Everglades?"

a. exotic species
b. Everglades
c. food chain
d. affect

____ 9. The movement of mattet due differences in density as a result of temperature change is called
a. conduction
b. convection
c. radiation
d. energy

____ 10. How does the transfer of energy throughout an ecosystem begin?
a. Humans create pollution.
b. Plants capture solar energy through photosynthesis.
c. The energy store on Earth is depleted.
d. Producers eat consumers.



____ 11. What cycle is represented in the above diagram?
a. N cycle.
b. P cycle.
c. water cycle.
d. C cycle.

____ 12. The relationships shown in thie above diagram would most likely be studied by
a. a geologist.
b. an ecologist.
c. a meteorologist.
d. an astronomer.

____ 13. Anything that has mass and takes up space is known as
a. protons.
b. newtons.
c. energy.
d. matter.

____ 14. A community of organisms and their abiotic environment is called a(n)
a. biosphere.
b. ecosystem.
c. ecology.
d. hydrosphere.

____ 15. Which of the following is NOT an important energy source for Earth systems?
a. sun
b. nitrogen
c. gravity
d. convection

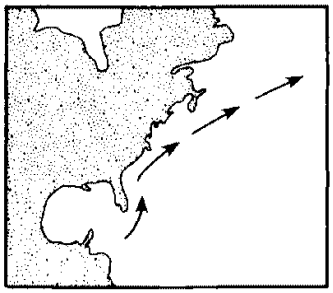
____ 16. What 2 products are produced during respiration?
a. water
b. carbon dioxide
c. both A & B
d. Neither A or B

____ 17. Evaporation, condensation, and precipitation are part of

a. the water cycle.
b. transpiration.
c. the geosphere.
d. the atmosphere.

____ 18. What fixes nitrogen into the soil or water?
a. plants
b. bacteria
c. phosphorus
d. fertilizer

____ 19. A closed system is a system in which the only thing exchanged with the surroundings is
a. energy
b. matter
c. mass
d. water



____ 20. What is the name of the ocean current in this diagram?
a. Labrador Current
b. North Atlantic Drift
c. Gulf Stream
d. North Equatorial Current

____ 21. Carbon is stored as a type of rock called carbonate in the
a. biosphere.
b. atmosphere.
c. hydrosphere.
d. geosphere.

____ 22. Energy is transferred between systems, but it cannot be created or destroyed, according to the
a. energy budget.
b. first law of thermodynamics.
c. second law of thermodynamics.
d. third law of thermodynamics.

Matching

In the space provided, write the letter of the description that best matches the term or phrase.
a. the largest population that an environment can support at any given time
b. a community of organisms and their abiotic environment
c. an organism that gets its energy by eating other organisms
d. a diagram that shows the feeding relationships among organisms in an ecosystem
e. an organism that gets energy by breaking down dead organisms
f. an organism that makes its own food

____ 23. producer
____ 24. consumer
____ 25. decomposer
____ 26. carrying capacity
____ 27. ecosystem
____ 28. food web

Essay-write answers in paragraph format on notebook paper.

29. Explain how channelizing 103 miles of the Kissimmee River to 56 miles in the 1960's affected the Everglades. Include at least 10 examples from the spheres & cycles you studied. Write b, g, a, & h by each example to represent the specific spheres. (10 points)
30. Determine whether the earth is an open or closed system. Support your answer.(5 points)

Bonus

31. Write the chemical reaction for photosynthesis (3 points)