**Section 1.8, 1.10, 1.11, 1.12 – ASSIGNMENT - VALUE 40**

**DUE: FRIDAY, OCTOBER 28, 2016**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ October 26, 2016**

1. **Circle ONE word in the brackets provided that best completes each sentence. Value 15**
2. An (artificial ecosystem **OR** natural ecosystem) is a living community free to interact with the physical and chemical environment and shows a greater biodiversity.
3. (Autotrophs/producers **OR** Heterotrophs/consumers) are organisms that can produce their own food.
4. An example of a natural ecosystem include (local parks OR pond).
5. A (food web **OR** food chain) is a step by step sequence linking organisms that feed on each other.
6. Cloud cover also (decreases **OR** increases) the albedo effect of the Earth.
7. Not every living organism provides (energy **OR** chemicals) for other organisms.
8. The most stable ecosystems with the (greatest **OR** least) biodiversity have complex and well-developed food webs.
9. (Humans **OR** Fish) are able to absorb energy from plant and to make Vitamin D in the presence of sunlight.
10. (Ecotone **OR** Ecology) is an area in ecosystems where organisms from both ecosystems interact with each other (transition areas).
11. Not all of the chemical energy that a (plant **OR** animal) creates can reach the animal that eats it.
12. The (atmosphere **OR** biosphere) is a region 8 km above ground and 8 km below ground where all livings organisms interact with nonliving things.
13. For the earth, the higher its overall albedo, the (less energy **OR** more energy) will be absorbed and available for maintaining the global temperature.
14. When a new (species **OR** chemicals) enters an ecosystem, it causes a disturbance because it will come into competition for a niche with one or more of the species already in the ecosystem.
15. (Snow **OR** black roof) has a high albedo.
16. Plants use most of that energy to stay (alive **OR** not alive) and to manufacture the chemicals it needs to grow.

**II.** Complete each of the following with appropriate word(s) missing, &/or provided examples/reasons, etc. (1 point for each fill in the blank, True or False, negative/positive aspects, or reasons). **Value 17**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are animals which has ***not adapted well*** to life in the artificial ecosystems of an urban setting.
2. Most artificial ecosystems show \_\_\_\_\_\_\_\_\_\_\_\_\_\_ biodiversity than natural ecosystems.
3. TRUE OR FALSE: A city park would lose more water through evaporation than a natural meadow.
4. Albedo is a measure of the percentage of light that is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by an object.
5. A ***non-native species*** that is introduced into an ecosystem is said to be \_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The largest percentage of solar energy that penetrates the atmosphere of the Earth is used to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. Indicate which of the following is not an example of a natural ecosystems; lakes, rivers, local park, or meadow.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a term used to describe a way of categorizing living things according to how they gain energy (levels contains autotrophs and heterotrophs).
9. Although top carnivores are not preyed upon by any other organisms, they may be used for food while they are still alive by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. Two *positive aspects* of the zebra mussels found in the Great Lakes include:
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Two *negative aspects* of the zebra mussels found in the Great Lakes include:
14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. Using examples, indicate ***two specific reasons*** why most aquatic (water) AND terrestrial (land) artificial ecosystems (parks, home gardens or ponds) ***are not able to maintain themselves*** in the way they were first set up.
17. Aquatic/water ecosystem – pond, fish tank

Reason 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reason 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Terrestrial/land ecosystems – park, home garden

Reason 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reason 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**III.** Short Answer – Answer the following ***on your own paper in full clear concise sentences***. **Value 8**

1. Most species that have adapted well to living in urban environments are omnivores, such as raccoons, skunks, opossums, and rats. ***Explain*** why these species are able to move from natural ecosystems to the artificial ones that exist in cities and towns so easily. Write your answer using complete sentences (on your own paper). **Value 4**

1. Woodpeckers and squirrels may obtain their food from oak trees. ***Explain*** why the two species do not compete for the same niche (on your own paper). **Value 4**

HALLOWEEN COSTUME IDEAS WELCOMED \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_