**Bozeman on Communities, populations, biodiversity, symbiosis, and population growth. Video 046**

1. Symbiosis means…

1. One organism wins out at the expense of the other.
2. ignoring other organisms
3. preying on other organisms
4. organisms living together

2. What is the difference between a community and an ecosystem?

1. a community contains biotic factors but makes no mention of abioic factors and an ecosystem contains abiotic and biotic factors
2. a community contains single organisms whereas an ecosystem also contains populations
3. Ecosystems are complex whereas communities are simple
4. Communities exist in biomes whereas ecosystems only exist in the biosphere.

3. Biodiversity is a measure of….

1. the total number of a single species exist on the planet
2. how many of a particular species exist in a defined area
3. how many fungi there are in a defined area
4. how many species there are in a defined area

4. Why is there less species diversity at the Equator and Poles?

1. Its too hot or cold for to many organisms so many species move away
2. a wide variety of weather selects for a wide variety of species and the equator and poles are fairly static in their weather patterns
3. It doesn’t rain at the poles or equator
4. humans have wiped out many species at the equator and its too harsh to live at the poles

5. If one organism benefits by the presence of another and the other organism is unaffected we call that …

1. Parasitism
2. Amensalism
3. commensalism
4. mutualism

6. Mutualism can be summed up as a \_\_\_ \_\_\_ relationship

1. lose lose
2. win lose
3. win neutral
4. win win

7. Exponential population growth can be defined as….

1. A doubling of the population each same period of time
2. a rapid increase in population followed by a leveling off when resources begin to run out
3. a steady linear increase in population size
4. when the carrying capacity of a population is reached

8. Is the lack of a mate a density dependent or independent limiting factor?

9. Is the lack of a habitat a density dependent or independent limiting factor?

10. Was the annihilation of the dinosaurs 65 million years ago by a giant asteroid a density dependent or independent limiting factor?

11. Why don’t populations grow exponentially?

1. Competition for food
2. Competition for space to live
3. Density independent limiting factors
4. It could be any of the above

12. Define carrying capacity:

1. The amount of weight an average member of the population can carry
2. K
3. The maximum population level an ecosystem can support
4. The minimum population needed not to go extinct.

13. Logistic growth is when….

1. The population keeps growing
2. The population grows quickly then dies
3. The population never gets going
4. The population grows then levels off

**1. d**

**2. a**

**3. d**

**4. b**

**5. c**

**6. d**

**7. a**

**8. density dependent**

**9. density dependent**

**10. density independent**

**11. d**

**12. c**

**13. d**