Review Final

1. Any organism that would like to spread its genes to the next generation must … )hint it starts with an R)
2. List the steps for the scientific method
3. Describe the major steps in the carbon cycle
4. Define mutualism. Give an example.
5. What is a niche? What is a habitat? How are they different?
6. Define organism, population and community. What is the difference?
7. Secondary succession proceeds until the colonizers are all in place. When this happens it is defined as a c\_\_\_\_\_\_\_\_\_\_\_ c\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. Bacteria do not have many restrictions on their growth. This is why they follow a \_\_\_\_\_\_\_\_\_\_\_\_ curve graph. They grow very rapidly.
9. The population of black bears has met its limit. There is not enough food to support all of the bears. This creates a limit on the number of bears that can exist in New Jersey. What is this called?
10. What type of graph would this follow?
11. Conservation biology is an area of science that employs biologists to save very low numbers of organisms. What term do we give to a group of organisms that may not exist in a few years?
12. Habitat degradation is when…
13. What is a monomer? What is a polymer? What is the difference?
14. A chemical compound contains 1 or more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
15. What subatomic particles are in the nucleus of an atom?
16. What the monomers for a protein?
17. On a scale of 1 – 14 a strong base would be \_\_\_\_\_\_\_. A strong acid would be \_\_\_\_\_\_.
18. All living things are made of \_\_\_\_\_\_\_\_\_\_\_\_. They are the basic unit of life.
19. What are the three main points to the cell theory?
20. What is the main difference between the prokaryotic and eukaryotic cell?
21. What is the job of DNA?
22. What is a gene?
23. Name one main structure that is found in plant cells but not animal cells.
24. The cells life > \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ > Mitosis > Telophase
25. What is the longest phase of the cell cycle?
26. G1, S, G2 all make up…
27. Chlorophyll has what job in plants? (few questions on this answer)
28. Write the equation for photosynthesis.
29. What process produces energy in the presence of oxygen?
30. What process produces energy without the presence of oxygen?
31. What is crossing over?
32. What is a genotype? What is a phenotype? Explain the difference.
33. A tool that is great at predicting the outcomes from crossing two organisms is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_. Give an example below.
34. Define homozygous. Define heterozygous. Explain the difference.
35. Define a human female gamete. Define a human male gamete.
36. List the pairings of nitrogen bases for DNA below. List the pairings for nitrogen bases when DNA matches with RNA as well. (Don’t forget U!)
37. The backbone of the DNA strand is made from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_.
38. The process where we create an identical copy of DNA is called…
39. Translation takes place in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
40. Draw mRNA and tRNA.
41. How old is earth?
42. Define the following words…
    1. Lysosome
    2. Ribosome
    3. Organelle
    4. Cell Membrane/plasma membrane
    5. Chloroplasts
43. Define the following words
    1. Mutualism
    2. Commensalism
    3. Parasitism
    4. Food Web
    5. Producer
    6. Scavenger/Detritus Feeder
    7. Autotroph
44. Define the following words
    1. Haploid
    2. Meiosis
    3. Crossing Over
    4. Zygote
    5. Fertilization
    6. Heredity