1. What are the four biomolecules?
2. What are the monomers of each of the four macromolecules?
3. What elements make up each of the four macromolecules?
4. Provide examples of each of the macromolecules?
5. What is dehydration synthesis?
6. What is hydrolysis?
7. What are the functions of the following organelles: nucleus, mitochondria, chloroplast, vacuole, rough endoplasmic reticulum, ribosomes, cell wall, cell membrane
8. What is the difference between a prokaryote and a eukaryote?
9. What is a phospholipid membrane?
10. Draw a phospholipid and label the parts (hydrophobic, hydrophilic).
11. What is an enzyme?
12. Draw an enzyme, active site, and substrate?
13. What factors can denature an enzyme?
14. What are the pH’s of an acid, base, neutral?
15. What is cohesion? What is adhesion?
16. What is polarity (think about water)?
17. List 3 facts about viruses?
18. Give 3 examples of viruses and what type of organism they infect.
19. What is passive transport?
20. What is diffusion? Osmosis? Facilitated diffusion?
21. What is active transport?
22. What is the equation for photosynthesis?
23. What is the equation for cellular respiration?
24. If there is no oxygen present for cellular respiration, what process will occur?
25. What organisms go through photosynthesis? What organisms go through cellular respiration?
26. What is Mitosis? What type of cells go through mitosis? Are they haploid or diploid?
27. What are the 3 parts of interphase? What percent of the cell spends its time in interphase?
28. What is meiosis? What type of cells go through meiosis? Are they haploid or diploid?
29. What is DNA?
30. What are the 3 parts of a nucleotide?
31. What are the differences between DNA and RNA?
32. Where does transcription occur and what is this process?
33. Where does translation occur and what is this process?
34. What is an insertion, deletion, frameshift, substitution mutation?
35. What is gel electrophoresis?
36. What is a karyotype?
37. Transcribe the following TAC CCG GCT ATG GTA 🡪
38. Translate the following AUG GGA AAA UUC GCG 🡪
39. What is a genotype?
40. What is a phenotype?
41. What is codominance?
42. What is incomplete dominance?
43. What is a phenotype?
44. What is a genotype?
45. What is evolution?
46. What is a vestigial structure? Give 3 examples.
47. What are homologous structures?
48. What are analogous structures?
49. List the 5 things that can CAUSE evolution (5 fingers).
50. What are 5 things that scientists can study to back up the theory of evolution?