

## Biology 102 Assignment One

1. What is considered the basic unit of life?
2. Explain why these are considered the basic units of life.
3. What is the chemical basis for all of life's kinship?
4. What is the difference between discovery science and hypothesis-based science?
5. How does natural selection adapt a population of organisms to its environment?
6. How might our understanding of evolution contribute to the development of new drugs?
7. Which four chemical elements are most abundant in living matter?
8. What is a molecule? A compound? What is the difference between them?
9. What is the *Atomic Mass* and *Atomic Number*?
10. What is an atom, and what are the three subatomic particles that make them up?
11. What is an ion?
12. What is an ionic bond, a covalent bond?
13. What is a hydrogen bond?
14. What are the four primary families of organic molecules?
15. Define a monomer and a polymer. What is their relationship to one another?
16. What are the two principle categories for cells?
17. What are some of the features that make these two groups different? What are some of the features that make them similar?
18. What are the specialized compartments inside a eukaryotic cell called, and why are they significant?
19. What is the biochemical process of food production called in cells? The biochemical process of foods breakdown for energy?
20. How do science and technology interact?