

**Name:**

## **Summer Homework**

Do your best to complete this without using the internet!

1. What is a cell?
2. What is an organelle?
3. Give 3 examples of organelles and describe their functions.
4. What is an atom?
5. What are the 3 subatomic particles that make up an atom? What are their charges?
6. What kind of bond(s) involve(s) a sharing of electrons?
7. Which bond is stronger: Hydrogen bond or covalent bond? Why?

8. What are the 4 classes of biological molecules? What are they made of?
  
  
  
  
  
  
  
  
  
  
9. What is kinetic energy? Give an example of something or a situation with kinetic energy.
  
  
  
  
  
  
  
  
  
  
10. What is potential energy? Give an example of something or a situation with potential energy.
  
  
  
  
  
  
  
  
  
  
11. Give examples of 2 organ systems. What do those systems control? Describe the functions of at least 2 organs or structures in that system.
  
  
  
  
  
  
  
  
  
  
12. What role does DNA play in the cell?
  
  
  
  
  
  
  
  
  
  
13. Proteins are a diverse group of molecules that do many things inside and outside the cell. How does DNA contain the information to build proteins?