

Name _____

Period _____

Regents Biology

Date _____

NUCLEIC ACIDS

1. What are the functions of a nucleic acids in living organisms?

a. _____

b. _____

2. What is the building block (monomer) for a nucleic acids? _____

3. What are the 3 parts of a nucleic acid monomer?

4. Draw a simple diagram of the nucleic acid building block.

5. Name the two examples of nucleic acids in all organisms.

6. What type of bond is used to bond the nucleic acid monomers together along one chain?

STRONG or **WEAK**

7. What type of bond is used to bond the nucleic acid chains together across the DNA double helix?

STRONG or **WEAK**

8. How is this difference in bonds important to the function of DNA in living organisms?

9. List the different kinds of nitrogen bases in all nucleic acids _____

10. List the nitrogen bases in DNA. _____

11. List the nitrogen bases in RNA. _____

12. Draw a simple diagram of a nucleic acid polymer.

13. Describe the shape of the DNA molecule. _____

14. Explain why this specific structure of DNA is very important to life on Earth.

15. Who was awarded the Nobel prize for the discovery of the structure of DNA?

16. When did they discover it? _____