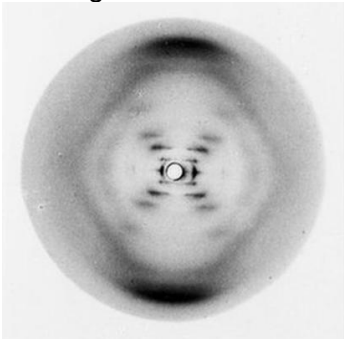


Unit 6 Checklist – DNA History, Structure, and Replication

#	Question	Lesson Exit Ticket
1	Identify 4 important scientists involved in discovering DNA's structure	1. 2. 3. 4.
2	Explain the significance of this image: 	
3	Identify the shape of the DNA molecule	
4	Explain why knowing the structure of DNA was important.	
5	Draw a nucleotide (the monomer of DNA). Label the phosphate, sugar, and nitrogen base	
6	Write the complimentary DNA sequence.	A T G C T G A G
7	What are the percentages of each nucleotide in the DNA sequence	A = 28% G = _____ T = _____ C = _____
8	Describe the complimentary base pairing pattern of DNA	A binds with _____, G with _____, C with _____, T with _____
9	Describe the types of chemical bonds that hold DNA together.	The sugar-phosphate backbones are held together by _____ _____ The nitrogen base pairs are held together by _____

10	<p>Label the diagram at right using the following terms:</p> <ul style="list-style-type: none"> • Base pair • Covalent bond • Hydrogen bond • Nitrogen base • Nucleotide • Phosphate • Sugar 	
11	<p>Identify the two most important structural characteristics of DNA.</p>	<ol style="list-style-type: none"> 1. 2.
12	<p>Explain why a cell needs to replicate its DNA (hint: what is it preparing to do?)</p>	
13	<p>Describe the process of DNA replication in 3 steps</p>	<ol style="list-style-type: none"> 1. 2. 3.
14	<p>Label the diagram at right using the following terms:</p> <ul style="list-style-type: none"> • DNA Before replication • DNA polymerase • Helicase • New complimentary DNA strands • Old template DNA strands • Replicated DNA 	
15	<p>What is the ultimate source of almost all mutations in an organisms' DNA?</p>	