Na	ame	Date	Period
DΝ	NA & Replication Worksheet		
1.	Write out the complete name for DNA:		
2.	A nucleotide is made of three parts: a, and a nitrogen containing		
	these three parts on the diagram to the right:		
3.	In a single strand of DNA, the phosphate group binds to of the next group.	the	
4.	The 5' end of a single DNA strand contains a free		while the 3' end contains a fr
5.	DNA was not thought to be the genetic blueprint origina contained the genetic co		
	wrong.)	20 and Didopi 01	inter (They were larer proven
6.	Purines have rings, and pyrimidines have	ring.	
7.	Check each of the following statements that are true with regard to Griffith's experiments Griffith discovered transformation in bacteria.		
	Mice injected with non-encapsulated bacteria quickly became sick and died.		
	Encapsulated bacteria can become "naked" bacteria.		
	Bacteria that are naked tend to be harmless.		
	Naked bacteria can develop a capsule only after exposure to the DNA of encapsulated bacteria.		
	Griffith's transforming factor was the protein in the capsule.		
	Heating the encapsulated bacteria preventing transformation of the naked variety.		
	Transformation allows bacteria to acquire new genes.		
	Enzymes that destroyed DNA would prevent tro	instormation.	
8.	Check each of the following statements that are true with regard to the Hershey-Chase experiment.		
	DNA was labeled with radioactive phosphorous		
	Protein was not labeled.		
	Radioactive sulfur was found in the offspring phages after they emerged from the cell.		
	Phage proteins were not transmitted to host c	ell or to offspring.	
9.	Chargaff's rule states that the DNA of any species cont	ains equal amounts	of &
	and also equal amounts of		
10.	Wilson and Franklin studied the structure of DNA using		and determine
	that the shape of the molecule was a		
11.	James Watson and Francis Crick amended Franklin and Wilson's conclusions and determined that the shape the molecule was instead a		
12.	Name the scientist(s) responsible for each of the follow	ing discoveries.	
	Bacter	rial transformation	
	The bo		
	DNA v		naterial of viruses
	The sk	ape of DNA was a l	nelix
	The sk	nape of DNA was a c	double helix
12	To DNIA thuming is complementary to	i outraino is seu	anlamantam, ta
13.	In DNA, thymine is complementary to	, cytosine is con	приетнентагу то