

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## ***STUDY GUIDE – CHAPTERS 14-16***

### Multiple Choice Topics (68 points)

- independent assortment
- Mendel's experiments
- P vs. F<sub>1</sub> vs. F<sub>2</sub>
- monohybrid Punnett squares
- dihybrid Punnett squares
- co-dominance
- incomplete dominance
- epistasis
- probability
- pleiotropy
- polygenic inheritance
- multiple alleles
- segregation of alleles in meiosis
- blood types
- pedigrees
- linked genes vs. unlinked genes
- sex-linked traits/Punnett squares
- hemizygous
- SRY gene
- X inactivation/XIST gene/Barr body
- XX and XY vs. ZZ and ZW
- gene linkage map
- 50% recombination
- nondisjunction in meiosis I vs. II
- chromosomal abnormalities
- autosomal vs. sex-linked vs. mitochondrial genes
- Chargaff's rules
- semi-conservative replication
- DNA replication: steps and enzymes
- telomeres/telomerase
- RNA primer
- leading strand vs. lagging strand
- anti-parallel/5' vs. 3' ends
- histones
- chromatin structure/organization
- transformation of bacteria
- Hershey-Chase experiment

### Free Response Topics (36 points)

- Punnett squares
- more Punnett squares
- even more Punnett squares
- chi square analysis
- linked vs. unlinked genes
- meiosis
- pedigrees
- DNA structure

