

STUDY GUIDE: MEIOSIS

KEY TERMS

meiosis	prophase I
chromosome	metaphase I
chromatid	anaphase I
centromere	telophase I
diploid	prophase II
haploid	metaphase II
gamete	anaphase II
homologous chromosomes	telophase II
synapsis	crossing over
tetrad	chiasmata

QUESTIONS

1. List the stages of meiosis and describe the principle events in each phase; indicate when and how synapsis and separation of homologous chromosomes occur.
2. Define haploid, diploid, homologous chromosomes, somatic and sex chromosomes, synapsis.
3. Discuss the significance of meiosis. (i.e. What is the significance of meiosis to genetics?)
4. How is meiosis related to gametogenesis?
5. How does meiosis contribute to variation during sexual reproduction.