1.Outline how meiosis results in the transmission of chromosomes from generation to the next. Compare mitosis and meiosis. Start with similarities and then focus on the key differences that really sets the two processes apart.

2.Outline three ways that sexual reproduction generates variation in offspring. Discuss the benefits and drawbacks between sexual and asexual reproduction. 3.Explain how shared, conserved fundamental processes and features support the concept of common ancestry for all organisms.

4.Discuss a few deviations from Mendel's model of inheritance of traits.

5.Explain how the same genotype can result in multiple phenotypes under different environmental conditions.

6.Explain how Mendel's two laws contribute to the inheritance of traits.