AP: CHAPTER 13: MEIOSIS AND SEXUAL LIFE CYCLES

1. The key features of the two versions of reproduction.
   a. Asexual Reproduction
      ______________________________________________________
      ______________________________________________________
      ______________________________________________________
   b. Sexual Reproduction
      ______________________________________________________
      ______________________________________________________
      ______________________________________________________

2. What is the role of meiosis in sexual reproduction?
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

3. What is a karyotype?
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

4. Identify several things that can be seen with a karyotype?
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
5. Label the diagram of the human lifecycle. Include the chromosome numbers.

6. Compare the products of mitosis with meiosis.
   a. Mitosis
   b. Meiosis

7. Meiosis is said to be a double division. Explain.
8. Meiosis is an important source of variation. Define and describe how each of the following contributes to variation within a species.

a. Independent Assortment

b. Random fertilization

c. Crossing Over

9. Draw a pair of homologous chromosomes and indicate a crossing over event and the products.

10. List the significant differences between mitosis and meiosis.

11. What is the significance of genetic variation and natural selection?