

Name

Date

**11.4 Meiosis Review**

**pg.323-329**

1. What type of cells are produced as a result of meiosis?
2. How many daughter cells are produced during meiosis?
3. What happens to the number of chromosomes during meiosis?
4. The parent cells are termed (diploid/haploid). The daughter cells are termed (diploid/haploid).
5. How many times does DNA replication occur?
6. What kind of chromosomes are split during Meiosis I?
7. At the end of telophase I & cytokinesis I, the daughter cells (diploid/haploid).
8. What kind of chromosomes are split during Meiosis II?

9. What occurs during crossing over? What phase does crossing over happen?

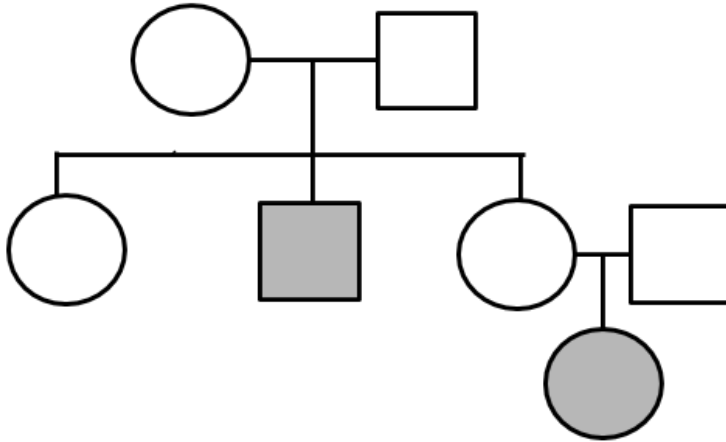
10. List three differences between meiosis and mitosis.

#### 14.1 Human Chromosomes

pg. 392-397

1. Color blindness is a recessive trait located on the X chromosome ( $X^c$ ). What percent of male offspring will have color-blindness if a male who is colorblind is crossed with a female who is heterozygous for the trait? Show your work!

2. What information do pedigrees provide us?



In humans, **albinism** is a recessive trait. The disorder causes a lack of pigment in the skin and hair, making an albino appear very pale with white hair and pale blue eyes. This disorder can also occur in animals, a common albino found in a laboratory is the white rat. The pedigrees below trace the inheritance of the allele that causes albinism.

3. Given the following genotypes, describe the phenotypes (normal or albino)

AA = \_\_\_\_\_

Aa = \_\_\_\_\_

aa = \_\_\_\_\_

4. Fill in the genotypes of the family on the pedigree above.

5. a) How many children does the couple have?

b) What is the sex of the oldest child?

c) How many grandchildren does the couple have?