Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Translocations and Pedigrees Study Guide

1. What happens when a chromosome undergoes a translocation?

2. What are two times that a translocation can happen?

 a.

 b.

3. Draw a chromosome below and label the p arm and q arm.

4. What are the major symptoms of Cri du Chat syndrome.

5. What is the cause of Cri du Chat?

6. What does each symbol mean on a pedigree?

7. Why does a dominant trait show up in every generation?

8. Fill out the genotypes for all possible individuals in the pedigree below.



9. What causes Huntington’s disease?

10. Why does the allele for Huntington’s disease stay in the population even though it makes everyone who has it dies?

11. Give a brief description of each of these autosomal dominant disorders:

 a) Achondroplasia:

 b) Hypercholesterolemia

 c) Osteogenesis imperfect

 d) Polydactyly

12. What are the characteristics of a pedigree demonstrating an autosomal recessive disorder?

13. Fill in the genotypes of the individual in the pedigree:



14. Give a brief description of each of the following autosomal recessive disorders:

 a. albinism

 b. cystic fibrosis

 c. Phenylketonuria (PKU)

 d. Tay-Sachs disease

 e. Galactosemia

15. How is sickle cell anemia a disorder that demonstrates codominance?

16. What are two questions you have over this material?