

Reading Guide Packet: Ch 15.1 & 15.2: Human Chromosomes & Human Genetic Disorders
Biology A

Name _____ Period _____

Ch 15.1: Human Chromosomes

1. What is the human *genome*?
2. What does a *karyotype* show?
3. Which pair of chromosomes in a human are the *sex chromosomes*?
4. Distinguish between *sex chromosomes* and *autosomes*.
5. Give 2 examples of innocuous traits in humans that are produced by recessive alleles.
6. Human blood groups are an example of what two types of inheritance?
7. Complete the Punnett square below for a cross between a parent with blood type AB with a parent with blood type O. What is the probability that a child of this couple will have type O blood?

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8. *Sex-linked* genes are located on which chromosomes?
9. What sex is most likely to show a recessive phenotype for a *sex-linked* trait? Why is this so?
10. How do the cells in females “adjust” to the extra X chromosome? What is an example in another species of this phenomenon?
11. What does a *pedigree* chart show?
12. In the *pedigree* chart below, indicate the meaning of the following symbols:
 - a. Circle
 - b. Square
 - c. Horizontal line between 2 shapes
 - d. Vertical line coming from a horizontal line
 - e. Filled-in shape
 - f. Empty shape



