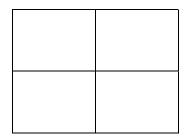
VLA Basic Biology: Unit 23 Worksheet

- 1. What are the sex chromosomes of a female? _____
- 2. What are the sex chromosomes of a male? _____

Hemophilia is a recessive sex-linked genetic disorder that impairs the body's ability to clot the blood when a blood vessel is broken. The alleles are carried on the "X" chromosomes. Alleles: "H" for the dominant allele which represents normal blood clotting. "h" for the recessive allele which represent the hemophiliac condition.

- 3. What is the genotype for a hemophiliac female?
- 4. What is the genotype for a hemophiliac carrier female?
- 5. What is the genotype for a hemophiliac male? _____
- 6. In the Punnett square below, cross a hemophiliac female and a normal blood clotting male.



- 7. From the Punnett square above, what is the probability of a hemophiliac male?
- 8. From the Punnett square above, what is the probability of a hemophiliac female?
- 9. In fruit flies eye color is a sex-linked trait carried on the "X" chromosomes.

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Red eye (Dominant) = R, White eye (Recessive) = r
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In the Punnett square below, cross the following parents: Red eye carrier female x Red eye male



10. From the Punnett square above, what is the probability of a red eye male?