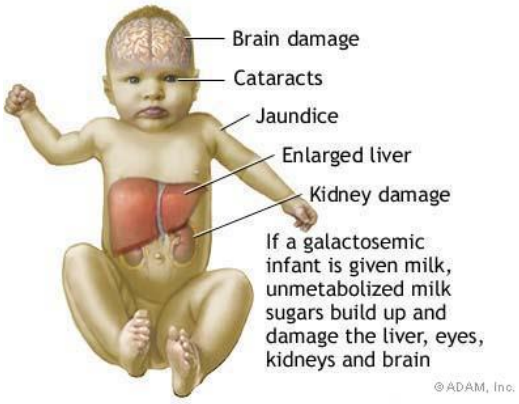
Name: _____ Date: _____ Class Period: _____

Warm Up



Galactosemia is an inherited disorder in humans. A person with the disorder cannot digest the sugars in milk. The allele for normal digestion (G) is dominant; the allele for galactosemia (g) is recessive.

A female who is heterozygous for the galactosemia trait and a male who has galactosemia have a child.

1. Identify the genotype of the father _____

2. Complete a Punnett square to show the possible genotypes and phenotypes of the child

3. Describe the probability that the child will inherit galactosemia (Phenotypic Ratio). ____:_____

4. Describe all the possible genotypes and phenotypes of the father's parents. Use a punnett square to support your answer.

5. Determine the genotype of all individuals in this family. Use the letter “G”.