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**Pedigree Practice**

Duchenne Muscular Dystrophy is a deadly disorder where the muscles grow progressively weaker. It is caused by a recessive gene on the X chromosome. The pedigree chart below shows the inheritance of the disease.



1. Is Duchenne MD more likely to occur in males or females? Explain your answer.
2. Individual H is a female with this disorder. Explain how she inherited this disease.
3. Individual K has this disorder, yet his father did not. Explain how this is genetically possible.
4. Individual G does not have the disease, yet his mother was a carrier and his father had the disease. Explain how this is possible.
5. Why is the genotype of the father unimportant when investigating X-linked traits inherited by male offspring?

Huntington Disease, a disease of the nervous system, is caused by an autosomal dominant gene. The pedigree chart below shows a family with individuals who have Huntington disease.



1. What is the probably genotype of Individual D? Explain your answer.
2. What are the probable genotypes of individuals H and I? Explain your answer.
3. What is the probability that N will not have Huntington’s?
4. Which individuals can be determined to have Huntington’s?
5. Identify the individuals whose genotypes cannot be determined without more information.