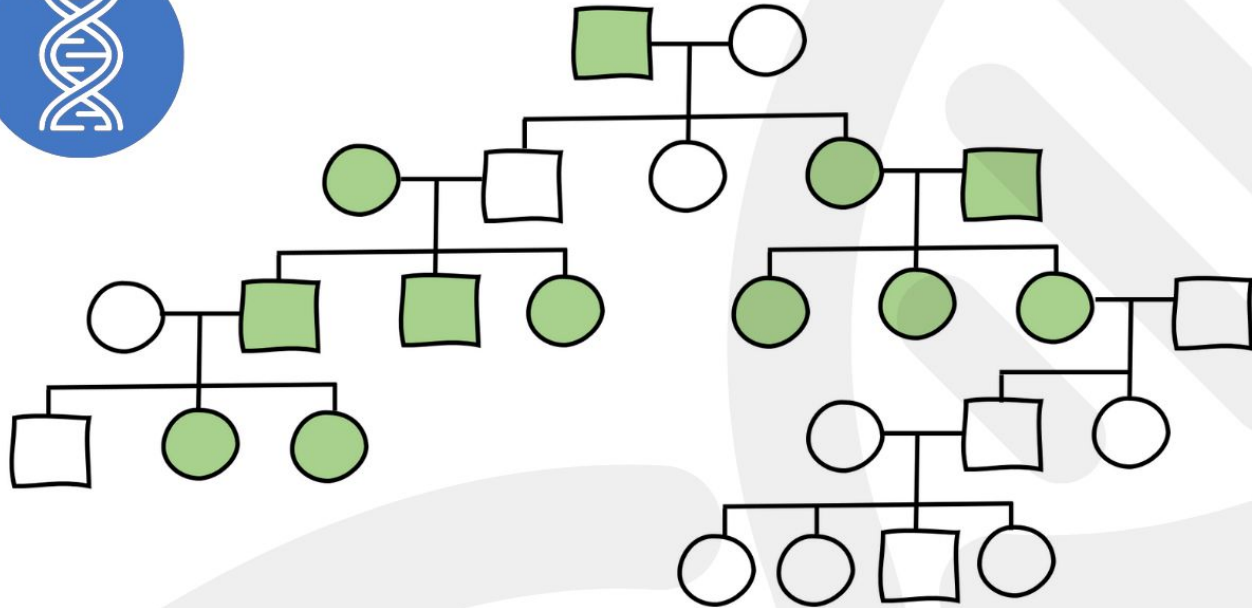


Name:

Date:

Pedigree Worksheet 3: X-Linked Dominant Traits



1. Hypophosphatemic rickets (R) is an X-linked dominant condition associated with low phosphate levels in the blood.

a. Using the diagram above, number each individual within each generation.

b. How many generations are represented within this pedigree? ____

c. Why are there no carriers represented in this pedigree? _____

d. The 7th individual of the 3rd generation has children with an unaffected male individual. Why are no male children of the next generation impacted? _____

e. Individuals 1 and 2 of the 2nd generation have children, 25% of which are unaffected. How is this possible? _____

2. Using your monohybrid crossing analytical skills, determine and list the genotypes of each individual in the pedigree above.

3. If this diagram were representative of an autosomal dominant disorder:

a. What change would you expect to observe? _____

b. What change would you not expect to observe? _____