

LAB: SEX LINKED TRAITS

Introduction: To simulate a random selection of chromosomes during a lab, a coin flip is usually used. This lab will use pennies to simulate the sex cells of two potential parents.

Part 1: Male Pattern Baldness

1. Using masking tape, label two coins – One $X^B X^b$ and one $X^B Y$
2. The dominant trait is for normal hair growth. The recessive is for baldness (develops later in life).
3. What are the phenotypes of the parents?

a. Mother:

Father:

4. Flip both coins to simulate random chromosome selection when making an offspring and fill in the genotypes the chart below. Repeat until the chart is completely filled in.

#	Result	#	Result
1		21	
2		22	
3		23	
4		24	
5		25	
6		26	
7		27	
8		28	
9		29	
10		30	
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

Summary:

Observed Results: How many females were: $X^B X^B$ _____ $X^B X^b$ _____

How many males were: $X^B Y$ _____ $X^b Y$ _____