

NAMES: _____

DATE: _____

PERIOD: _____

BEAKER BABIES

Procedure:

1. Get together with your "spouse" at your lab station.
2. Using masking tape and a felt pen, mark the three beakers at your lab station as male, female, and offspring.
3. Determine your personal genotype and phenotype by following your teacher's instructions and this list:
 - A. Sex / XX=female XY=male
 - B. Hair Color / BB=black Bb=brown or red bb=blonde
 - C. Eye Color / EE=brownish Ee=greenish ee=bluish
 - D. Height / TT=tall Tt=medium tt=short
 - E. Size of Feet / FF=big Ff=medium ff=small
 - F. Tongue Roll / RR or Rr=tongue roller rr=non roller
 - G. Color Blindness / CC or Cc=color-sighted cc=color-blind
 - H. Bone Structure / SS=large Ss=medium ss=small
 - I. Blood Type / AA AB BB OO
 - J. Widow's Peak / WW or Ww=widow's peak ww=no widow's peak
4. Write your genotype and phenotype information in the attached data table and also on your chromosome models. Be careful to label your gametes A-J and place them in proper order according to the above list.

5. Cut your chromosomes along the lines and place all the "genes" for male and female into the marked beakers.
6. Randomly draw out genes from the beakers so that you create a complete chromosome for each parent. Use only the first of each gene drawn to form your gamete. Place this information in the data table under gamete.
7. Now, crossing the two gamete chromosomes of the parents list the information for genotype and phenotype of the F1 generation. List this information in the top (your kid) F1 section of the data table.
8. Using the same procedure as before, determine the gamete chromosome for your F1 generation and list this in the data table.
9. Find another pair of parents and fill in their F1 information in the bottom (their kid) F1 section of the data table.
10. The two F1 generation offspring are now going to have offspring of their own. Randomly cross the gametes from these F1 generations to determine the genotype and phenotype for the F2 generation --YOUR GRANDCHILDREN!!
11. Draw a picture of the lil' nipper with the appropriate characteristics and then make out your birth announcement and share with all your friends and loved ones...

Beaker Babies Data Tables

Female, P1			
Characteristic	Genotype	Phenotype	Gamete
a. sex			
b. hair color			
c. eye color			
d. height			
e. size of feet			
f. tongue roller			
g. color blindness			

h. bone structure			
i. blood type			
j. widow's peak			

Male, P1

Characteristic	Genotype	Phenotype	Gamete
a. sex			
b. hair color			
c. eye color			
d. height			
e. size of feet			
f. tongue roller			
g. color blindness			
h. bone structure			
i. blood type			
j. widow's peak			

F1 Generation, Your Kid

Characteristic	Genotype	Phenotype	Gamete
a. sex			
b. hair color			
c. eye color			
d. height			
e. size of feet			
f. tongue roller			
g. color blindness			
h. bone structure			
i. blood type			
j. widow's peak			

F1 Generation, Their Kid

Characteristic	Genotype	Phenotype	Gamete
a. sex			
b. hair color			
c. eye color			
d. height			
e. size of feet			
f. tongue roller			
g. color blindness			
h. bone structure			
i. blood type			
j. widow's peak			

F2 Generation, The Grandkid			
Characteristic	Genotype	Phenotype	Gamete
a. sex			
b. hair color			
c. eye color			
d. height			
e. size of feet			
f. tongue roller			
g. color blindness			
h. bone structure			
i. blood type			
j. widow's peak			

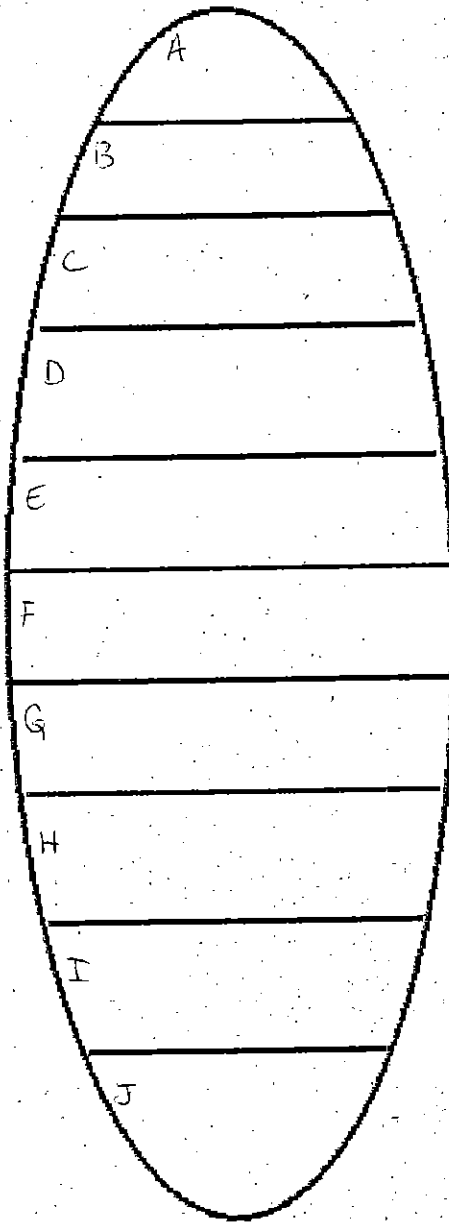
Birth Notice

(circle or fill in the appropriate information for either F1 or F2 child)

This is to announce the birth of _____ a delightful little boy/girl. The proud parents are _____ and _____.

The baby has _____ hair and will grow to be quite short/average/tall. Naturally, he/she can/cannot roll his/her tongue. This brown/green/blue eyed, color blind/color-sighted baby with his/her type _____ blood will be a welcome addition to the family. With/without his/her widow's peak, fine/medium/heavy bone structure and dainty/clodhopper feet, there is no doubt that this cute, dimpled little bundle o'joy is bound for fame and fortune. To be sure, he/she resembles _____ more than _____.

Trait # 1



Trait # 2

